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WALKS AND TALKS ON THE FARM.—NO. 20.

MESSRS. GIBBUD BROS., of Waterbury, Conn., sent me to-day a sample of their "magic binder." It consists merely of a small cast-iron hook, with a piece of tarred twine attached. The twine is put round the sheaf and drawn into the hook, which holds it tightly in its place. The Messrs. G. say that one man, with this contrivance, can bind as much as four with the ordinary wheat band. This, I should think, is somewhat doubtful. If it would save one-half the labor, or even one-quarter, it would pay for itself twice over. I took it into the field where the men were binding wheat. It ties up the sheaf to perfection, but the men said they could do it quicker in the ordinary way. But then they say so of *everything* that is new, no matter how valuable it may be. The other day I sent to the Remingtons for a couple of Flanders' adjustable grain cradles. They are acknowledged, I believe, to be the best cradles in the country. As I was bringing them home I offered to bet ten dollars that the men would say that they "were not as good as the old ones." Well, after dinner, I saw three or four of them congregated round the cradles, swinging them at imaginery wheat, balancing them on their hands and examining them with a great air of critical wisdom. What the general verdict was I do not know, but just as I got up I heard one of them say, "Give *me* the old 'un"! And so it always is. I have never known an exception. It is part prejudice and part awkwardness. It takes a little while to get "the hang" of any new implement. Last year I got one of Sayre & Remington's horse hoes and not a man would use it unless compelled to do so. This year we have used it almost every day in the corn and potatoes, and they prefer it, and the Johnston cultivator, to all others. It will be so with the cradles next year. In fact one of the men has already had the courage to say, "they are the neatest cradles I ever see." But why this prejudice? What is the cause of it? Is there anything in the country air that engenders it, or the fresh stirred soil? Of course it cannot be ignorance, because we find some quite respectable farmers who are not entirely destitute of the same disposition.

The weeds got the start of me among the carrots. In all other crops I managed to keep ahead, though it has been a bad season for killing them. We cannot afford to be without carrots, at least as an occasional feed for horses; but I am inclined to think they cost more than any other root. They are so slow in coming up that more or less hand weeding is absolutely necessary—and when you have to pay from six shillings to a dollar a day for Dutch women, the less of such work one has to do the better.

I have half an acre or so of parsneps which are splendid. They are excellent for milch cows in the spring, yield abundantly, and germinate and grow quicker than carrots, and consequently require less labor in weeding, and what is a point of considerable importance, they can be left in the ground all winter and dug in the spring as wanted. But the only root crops which can be profitably grown on an extensive scale as food for stock, are mangold wurzel, and the Swedish and common turnips. The whole labor of cultivation and weeding can be done with the cultivator and hoe. It seems, however, that there are still some farmers who have not discovered the best way of thinning out turnips. *They do it by hand!* It is double the labor and not half as good as thinning them out with the hoe. You require a hoe that is straighter in the shank than they are usually made, and the better way is to push it from you through the rows of turnips rather than to pull it towards you. In fact you require both motions. Push it boldly through the turnips, leaving a bunch of two or three plants and then with the return stroke of the hoe thin them out to a single plant. They should not be left closer than nine inches or a foot apart in the rows. The great error is in leaving the plants too thick. There are few people who have sufficient courage at first to dash the hoe straight through a nice lot of young plants, leaving only one where there was a dozen and this one in rather a forlorn looking condi-

tion. It will, however, soon revive and grow all the better for the rough treatment it has been subjected to. It is a common opinion in England that the young turnip plants grow best when they have so little hold of the soil that the wind can blow them about. Like corn, you cannot cultivate and hoe turnips too much when young.

Mr. J. D. Weaver, of Penfield, N. Y., asked me this spring to try a couple of his "improved orchard and farm whiffletrees." The tug is passed round the end of the whiffletree and is fastened behind, so that the tugs are really wider than the whiffletree. In plowing among trees they are certainly a great improvement over the ordinary whiffletrees; and I like them very much for cultivating among corn when it is large. Like all really valuable inventions it is a very simple one, and the wonder is that no one has thought of the arrangement before.

Last winter mill feed sold in the city for $42 per ton. I was offered it to-day for $15, and the miller remarked that it might be cheaper in a short time. The crop of hay is undoubtedly large, though I think not so large as is generally supposed, and straw and coarse fodder of all kinds will be unusually abundant. This will keep down the price of mill-feed, and this has a tendency to lower the price of wheat. The New York papers express the "fear" that high prices of farm produce may become "chronic." But no such fears are entertained among farmers. We hope never again to see prices as low as they were before the war. We *need* higher prices. It would be better for the farmers and better for all classes, for it is a fact that the prosperity of the nation depends very greatly on the prosperity of farmers. Agriculture in this country has never been as lucrative as trade, and it is much to be desired that we should have a higher range of prices.

The grass on the north meadow this year is splendid. We have cut about three acres and have drawn in eight loads. Last year the crop was not over half a ton to the acre. It so happened that I could not pasture it last fall, owing to the fact that there was some corn on part of the field. After harvest we had abundant rain, while the first part of the season was very dry. I think the after grass was fully as heavy as the first crop. This was left to rot on the ground. It formed a good coat of manure, and the best crop of grass that has been grown on the farm for many years is the result. There are few crops that pay so well, for the labor and expense involved, as a good piece of grass that will give say two tons of hay per acre. It is seldom that hay sells in the city for less than fifteen dollars a ton, and it is frequently twenty dollars. The only drawback is that where you sell your hay you are likely to soon impoverish your land, and it is not every farmer who has the "knack" of feeding stock to advantage.

Among the multitude of machines used in American Agriculture it is a matter of surprise that the wheat hoe, so common in England, has not been introduced. The reaper has compelled us to free our land from stones and stumps, and there is now no impediment in the way of the wheat hoe. That it is greatly needed, there can be no doubt. Look at the red-root and Canada thistles which abound in so many wheat fields. The horse hoe would destroy them, and at the same time mellow the soil and increase the growth of the crop.

The main difficulty in the way in this section is the almost universal practice of seeding the wheat with clover in the spring. But in such a spring as the last the wheat might have been hoed before the clover was sown. But, admitting that this is not generally the case, will not the advantages of hoeing the wheat warrant us in changing our system of rotation?

I would like the opinion of farmers in regard to the following rotation on wheat farms in this section. It is merely a suggestion. There may be objections to it that do not occur to me:

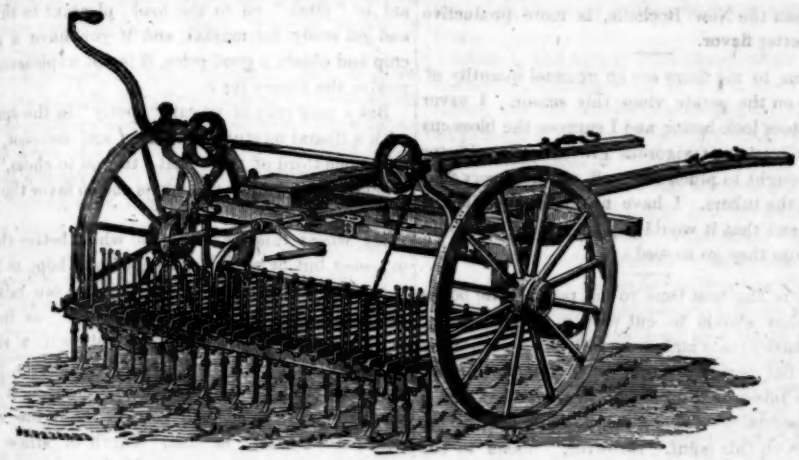
First—The land must be rich enough to bring wheat on a clover sod turned over just previous to sowing. This is almost the universal practice in England, and the only objection I can see to its adoption here is that we sow our wheat a month earlier, and it may be that if we should have a drouth in August the land might be too dry for good plowing or for germinating the seed.

Second—Drill in the wheat and hoe it in the spring to kill the grass and weeds.

Third—After the wheat is harvested plow the

land, and if it is very foul harrow and cultivate it as occasion may offer. Then before winter sets in plow it again and leave it in the rough for the frosts to mellow it. Then in the spring plow it again once or twice as may be necessary, and cultivate and harrow till every weed is destroyed and the land is as fine as a garden.

Fourth—Plant corn or potatoes or beans, and keep the cultivator constantly at work between the rows. If the previous culture has been thorough, there will be no need of hand hoeing; the cultivator and horse hoe will do all that is needed and will mellow the soil far deeper and better than it can be done with the hoe.



Fifth—After the corn is off, plow the land and let it lie till spring. Then, without again plowing, simply using a two or three horse cultivator or gang plow, sow barley and seed it down—and if you could use a little artificial manure on the barley, to give it a good start, so much the better.

The advantages of this system are: 1st. The land gets a thorough cleaning once in four or five years without the necessity of a summer fallow. 2d. Most of the work is done in the autumn and spring rather than during the hot weather. 3d. The corn, potatoes or beans need little or no hoeing, while the land will be very warm and mellow at planting time, thus ensuring what is so desirable for the corn crop, an early and vigorous start.

It is a general opinion that corn or beans require less hoeing on a freshly inverted sod than on stubble land. This is true if the stubble is only plowed once, but if it is plowed, as I propose, three or four times and thoroughly cultivated and harrowed, far less labor will be needed to take care of the corn than on the sod land. This I have found to be the case the present season. I had a wheat stubble that was full of quack grass. I determined to kill it. As soon as the wheat was off, I plowed the land, and a few weeks later harrowed it; then plowed again; and again in the spring, followed by the harrow and cultivator. Then plowed again and cultivated and harrowed till the quack was brought to the surface, when I raked it together in heaps and burnt it. I then planted beans two feet five inches apart, and a handsomer crop I never saw. There was a little quack left, but the Johnston cultivator soon used it up. There was about an acre in this field that was in orchard, and which had not been plowed for three or four years. I turned it over and planted beans with the rest of the field. Now the beans on this sod land require at least twice as much labor in hoeing as those on the other part of the field. I conclude, therefore, that the reason why sod land is considered better for hoed crops is owing to the fact that when they are planted on stubble land little pains are taken to make the land clean before planting.

But about the Wheat Hoe. I have heard doubts expressed as to the feasibility of running it between the rows without cutting up the wheat. But a moment's reflection will show that it is not so difficult to guide the hoe as one would at first imagine. The hoes are of equal number and operate at equal intervals with the system of spouts in the drill. And as the hoe is run on precisely the same width of land sown with the drill, any irregularities in the rows would extend the whole width of the horse hoe. All that you have to do is to see that the blades of the hoe in one of the drills are guided aright and you are sure that all the rest will run in the rows.

I have just had an engraving of the English Wheat Hoe made for the *Genesee Farmer*, and I do hope that some of our Agricultural implement manufacturers will shortly bring out something of this

kind. At our "International Wheat Show," in Rochester two years ago, Mr. A. B. Travis, of Brandon, Mich., exhibited a machine for hoeing wheat, which was said to do the work well, but we had no opportunity of trying it at that time. Whether he is now doing anything with it or not, I do not know.

Mr. John S. Collins, of Morristown, N. J., sent me a few days ago a box of blackberries, which were certainly very nice. He writes me that it is a variety which originated in Burlington county, N J. It commences ripening from five to ten days earlier than the New Rochelle, is more productive and of better flavor.

It seems to me there are an unusual quantity of blossoms on the potato vines this season. I never saw potatoes look better, and I suppose the blossoms are an indication of vigorous growth. The Doctor thinks I ought to pluck them off, on the theory that they rob the tubers. I have no doubt that such is the case and that it would pay to pull off the blossoms before they go to seed.

When is the best time to cut peas? The books all say they should be cut with a greenish tinge. Wheat, barley, oats and corn will ripen after they are cut, but how far the pods of peas will fill out from the juices in the vines after they are cut, I cannot ascertain. There seems to have been no experiments on this point. However, I mean to cut mine as soon as the lower pods are quite ripe, even should the tops be still green. Were the seed the only object, I presume it would be better to let them get pretty ripe, even at the risk of losing some of the earliest pods from shelling, as you would get more peas from the ripening of the green pods than you would lose from the shelling of the over-ripe ones. But when the haulm is intended for fodder it is better to cut with a greenish tinge. If well cured, pea vines make excellent fodder, especially for sheep. They are "second only to hay." In fact pea *straw* contains more nitrogen than the *grain* of wheat, barley, oats or Indian corn. A good crop would give a ton and a half of straw per acre.

In regard to the best manner of harvesting peas I wrote to John Johnston, and he replies:

"I think you would harvest your peas best with the mowing machine; and keep a revolving hay rake following, the horse going on the cleared ground half of the rake would make as wide as the machine would cut. Of course you would have to keep men putting that raked, out of the way for the horses the next time round. The first round would require to be mown by hand. I have seen a crop of barley taken up without loss in this way that was as flat laid as it could be. I saw my neighbor, Mr. Noyes, take up three acres of peas and of large growth with the revolving horse rake with but little loss, but he had to let them get so ripe that the value of the fodder was greatly lessened."

Mr. Johnston has just thrashed his twelve acres of winter barley, and had six hundred bushes. He sowed two bushels per acre, but thinks he should have had more barley had he sown only a bushel and a half.

Wheat is a *pleasant* crop. It is a pleasant crop to put in; pleasant to see it cover the ground in autumn; pleasant to see it grow in summer; pleasant to look at as it whitens for the harvest; pleasant to see a good self-raker lay it down in sheaves ready for the binders at the rate of ten acres a day; pleasant to "pitch" on to the load; pleasant to thrash and get ready for market, and if you have a good crop and obtain a good price, it is not *un*pleasant to receive the money for it.

But a poor crop of wheat, "spotty" in the spring, with a liberal mixture of thistles and red-root, and about one-third of the wheat "turned to chess," has a tendency to depress the spirits and to favor the idea that "farming does not pay."

My wheat this year is on the whole better than I expected, but by no means as good as I hope to have it in a few years. I feel sure that we can raise as good wheat in the "Genesee Country" as in the palmiest days of old. I have not seen a single midge in my whole crop of wheat this season. It is what they call "amber weevil proof." It is a bald wheat, in color about half way between the white and red varieties, medium length of straw and ripens a little earlier than the Mediterranean. The farmer I got it from raised thirty-three bushels per acre last year.

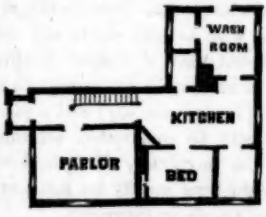
One of my neighbors who has been acquainted with the farm for many years offered to bet last fall that he would have more wheat from eighteen acres than I should from forty acres. I did not take the bet. "You will have good wheat on the summer fallow," he said, "but I presume you are prepared for a poor crop on your barley land and after the peas." Now it so happens that my summer fallowed wheat is the lightest crop, while that after barley is decidedly the best I have. The summer fallow was an old sod that had not been plowed for thirteen years. I broke it up in July, and as the weather was very dry the sod did not rot. I plowed it however, again, just before sowing and managed to get it in in pretty fair order. Had the sod been thoroughly rotted, I have no doubt it would have given a heavy crop. I presume, should I sow it again to wheat this fall, it would produce a better crop next year. But as there is considerable red-root in the wheat I shall plow the land this fall, and then plant corn next spring, and, with the free use of the cultivator, I think this treatment will kill the red-root. But is it not curious that red-root should spring up so thickly on land that had not been plowed before for a dozen years or more? The seed must have lain in the ground all this time.

HOW TO ALTER A "COUNTRY HOUSE."

THE author of *My Farm of Edgewood* has had several very interesting articles on country houses and their surroundings, showing that he fully appreciates the trials, as well as the pleasures of country life, and his advice about country houses is most admirable. He gives a fascinating picture of what a time-honored farm house, with its door of oak studded with nails, opening across the centre, and its low ceilings with projecting beams, may be changed into without altering its characteristic look of age, and making it "smart" when it should be venerable.

Such houses, though common in New England and the older Eastern States, are, as a general thing, quite unknown even no farther west than Western New York, and we doubt whether a dozen of our readers west of this State know how an old fashioned door opening across the centre looks; and the only house that they have ever seen with beams projecting through the ceiling was built of logs and not found capable of much ornamentation, except of vines outside and by the open fires within. Mr. Lackland's house, which "could boast of no respectability of age," is much more like the majority of those which farmers are to try to improve. He says:

"The height of its rooms was of that medium degree which neither suggested any notion of quaintness nor of airiness. Its entrance hall was pinched and narrow; its stairway inhospitably lean, and altogether its appointments had that cribbed and confined aspect which to one used to width and sunshine, was almost revolting. The wash-room was positively the only apartment below stairs which had a southern aspect. I give his drawing of it,



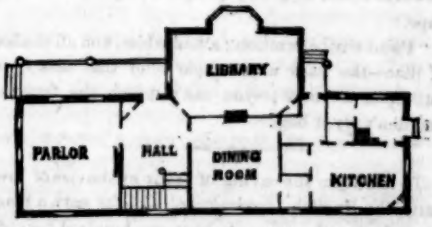
and it is a good type of a great many "small and convenient houses" scattered through our country towns.

"'Of course this will never do,' wrote Lackland to me, 'and yet the skin of the house (as our carpenter calls it) is very good, and I wish to make the needed changes so far as possible, without disturbing the exterior outline of the main building. But how shall I rid myself of that preposterously narrow entrance way in which I can almost fancy Mrs. L., (who is something large) getting wedged on some warm day? How shall I throw light into that dismal parlor? You will perceive that along the whole south front there is not a single available window below. Now, half the charm of a country place, to my notion, lies in the possession of some sunny porch upon which the early vines will clamber, and under whose eaves the Phœbe birds will make their nests. I want too, my after dinner lounges at a sunny door, where I can smoke my pipe, basking in the yellow light, as I watch the shadows chasing over the grass. About the stupid little design I send you, there is neither hope nor possibility of this.

"Mrs. L. and myself have scored out an incredible number of diagrams—all of which have been discussed, slept on, admired and eventually condemned. Sometimes it is the old pinched entrance way that works condemnation; sometimes (on my part) the lack of sunny exposure; and oftenest (on hers) the lack of closets. She insists that no man yet ever planned a house properly on this score. She doesn't see clearly (being deficient in mathematics) why a closet shouldn't be made in every partition wall. She don't definitely understand, I think, why a person should thwack his head in a closet under the stairs. She sometimes (our carpenter tells us) insists upon putting a window through a chimney; and on one occasion (it was really a very pretty plan) contrived so as to conduct a chimney through the middle of the best bed room; and the best scheme of all, to my thinking, positively had the stairs left out entirely.

"In this dilemma, I want you to tell us what can be done with the old shell, so as to make it passably habitable, until we find out if this new passion for country life is to hold good."

Upon this I ventured to send him this little plan of adaptation, which, though not without a good many faults that could be obviated in building anew, yet promised to meet very many of their wants, and gave to Lackland his sunny frontage:



"Here you have," I wrote him, "your south door, and porch to lounge upon, and your south bow window to your library, which, if the rural tastes grow upon you, you can extend into a conservatory, covering the whole southern flank of the apartment. The parlor, too, has its two south windows, and al-

though I should have preferred to place the chimney upon the northern side, to the exclusion of the window there, yet it seemed best to make use of the flue already established. The hall is well lighted from the north, and will give room for the hanging of any of your great-aunt's portraits, if you have any.

"There is an objection to traversing the dining room in going from the kitchen to the hall door; but it could not well be obviated, with the existing shell of your house, without reducing the size of the dining room too much, or (another resource) without increasing largely the dimensions of the hall—throwing the intervening space between it and kitchen into store rooms and making the library do duty for the spread of your table.

"The dining room moreover, having only north exposure you may condemn as dismal. I propose to obviate this, and to give it a cheerful south light by an extravagance which I dare say the architects will condemn, but which will have its novelty and possible convenience.

"The fire places of library and of dining room, are, you observe, back to back. Now I would suggest that the two flues be carried up with a sweep to either side (uniting in the garret) in such sort, that a broad arched opening shall be left above the mantel from one room into the other. This may be draped, if you like, with some tasteful upholstery; but not so far as to forbid a broad flow of the warm light from the bow window of the library; while upon the mantles of even height, you may place a Wardian case that shall show its delicate plumes of fern between your table, and the southern sunlight all winter long. It would moreover be quite possible, owing to the breadth of partition wall afforded by the two flues, to arrange folding shutters for the complete closing of the arch-way whenever desired. For my own part, I love such little novelties of arrangement, which mark a man's house as his own, however much they may put the carpenters to the gape.

"Paint with discretion; avoid white, and all shades of lilac—the most abominable color that was ever put upon a house;—you can't match the flowers, and don't try, I beg."

To illustrate the saving of labor by the use of low carts, the English *Agricultural Gazette* says a man in spading will turn over about one hundred tons of earth per day. If he had to throw it over the side of a cart or wagon five or six feet high, he could not handle more than one-fifth of the weight he lifted in the first place. Consequently, for every foot the cart is lowered a fifth part of the labor will be saved.

RANDOM TALK ABOUT POULTRY.

WRITTEN FOR THE GENESEE FARMER BY C. N. BEMENT.

MERIT OF FOWLS.—Like human beings fowls are susceptible of being influenced by change of climate, dirt, soil, and water. They require a little care until they become acclimated, which they never fail to be after a time; but it is unfair to condemn them as tender or unfitted for any particular locality, because a trial of a few months has not been satisfactory. Their habits should be studied. Some bear confinement without injury, others require a range. Their properties are so different that every one may be suited if he will only take the trouble and ask proper information.

DOMESTIC FOWLS HAVE THEIR PECULIAR WHIMS.—When they are compelled by rain, snow, or some frost to take shelter during the day, they do not retire to their dormitory—the hen-house where they roost at night, but prefer some other building to which they can have access, and use as a drawing-room, and from which they will adjourn to roost when the proper time comes.

KEEPING FOWLS.—The most important requisite for keeping fowls on a large scale, is to begin with a moderate number and feel one's way, and increase as the business will warrant. To commence with any business on a large scale one does not well understand is almost sure to result in extensive losses, if not failure. It requires some time and experience for any one to discover the various avenues to money-making, which are likely to lead to the best profits, and to be most free from losses.

POULTRY KEEPERS—May be divided into two parts; those who keep for fancy, and those who keep for profit. These again may be divided into two; those who keep fowls—first, because it is the fashion; and afterwards with an object in view, like a young man who smokes—because others do.

Those who wish to keep fowls and desire to be successful, should have a distinct building facing the south or southeast, as the morning's sun is congenial to them in cold weather; and a yard set apart for them, should be constructed according to the purposes of the proprietor. He who keeps a cock and six or eight hens merely for home supply, will require a very simple arrangement.

KEEPING POULTRY.—One of the principal objects of keeping fowls by a private family is to have *fresh* eggs. The time for the hens to lay eggs depends much upon the warmth in which they are kept, and therefore, in general, on the season. There are two seasons or periods of the year when poultry lay most; these are spring and autumn. Cold retards or prevents this, hence scarcity of eggs in winter. March pullets of the Asiatic tribe will often commence laying when five or six months old, and to them should we look for hardy layers.

In the hatching of poultry, nature is the best guide, and all arrangements made for the accommodation of the hen should conform as far as possible to the example which nature sets before us. Hens in a state of nature make their nests on the ground. This method, however, cannot at all times be acted upon. The best mode of making the nests of sitting hens is of pine leaves, which offer a medium between the natural habits of the hen and the dryness of a wood-box filled with straw. The pine leaves also afford the hen an opportunity of freeing herself from those insects which are frequently so troublesome to hens when sitting.

Eggs for Hatching.—The number of eggs to be placed under a hen is dependent on the size of both eggs and hen; an odd number, from eleven to thirteen is to be preferred, as being better adapted to the covering of the nests, thirteen are enough, though a very large hen might cover more, but a few stronger well hatched chickens are better than a larger brood of weaklings, that have been delayed in the shell perhaps twelve hours over the time from insufficiency of warmth. At the end of a week, it is usual with sitting turkeys to add two or three hens eggs, "to teach the young turkey to pick." The plan is not a bad one; the activity of the chickens does stir up some emulation in their larger brethren. The eggs take but little room in the nest, and will produce two or three very fine fowls.

Health of Fowls.—The good health of fowls may be known by the fresh and florid color of their combs, and lightness and dryness of their eyes, the nostrils being free from any discharge, and the gloss of the plumage.

Fattening Fowls.—Though in general fowls when in health, will become sufficiently fat by having plenty of food, with air and exercise, yet they are sometimes fattened for market by keeping them in confinement, with abundance of food and little light, so that in fact they have nothing to do but eat. It is a common practice with some to coop their fowls for a week or two, under the notion of improving them for the table, and increasing their fat; a fact, however seldom succeeds, since the fowls generally pine for their loss of liberty; and slighting their food, lose instead of gaining additional flesh. Such a period is in fact too short for them to become accustomed to confinement. It takes several weeks to fatten fowls confined in coops. The prevention of light by inclining fowls to a constant state of repose except when moved by the appetite for food, promotes and accelerates obesity; but such a state cannot be a state of health, nor can the flesh of animals so fed equal in flavor, nutriment and salubrity that of the same species fed in a more natural way. Economy and market interest may perhaps be the best answered by the place of darkness and close confinement; but a feeder for his own table, of delicate and ambitious of furnishing his own board with the choicest and most salubrious viands, will declare for the natural mode of feeding.

Experiment in Feeding Charcoal to Fatten Poultry.—Four turkeys were confined in a pen and fed on meal, boiled potatoes and oats. Four others of the same brood were also at the same time confined in another pen, and fed daily on pulverized charcoal mixed with meal and potatoes. They had also a plentiful supply of broken charcoal in their pens. The eight were killed on the same day and there was a difference of one and a half pounds each in favor of the fowls which had been supplied with charcoal, they being much the fattest, and the meat greatly superior in point of tenderness and flavor.

Poultry Running at Large.—Domestic fowls running at large do much better than they will if restricted to narrow limits in the coop or yard. Their health is improved, their flesh is better and finer and better tasted, and they will produce more eggs at large than in confined situations. The turkey in particular is a strenuous advocate of the largest liberty. Hens in a garden are a pest and a nuisance, but there is no necessity of being troubled with them. A common picket fence six feet high will effectually exclude them; it being well known that fowls rarely attempt flying over such a fence, and when made plain, such a fence costs perhaps as little as almost any other.

Feeding Fowls.—In a state of nature, fowls run over a great extent of ground before they get a crop full. They pick up their food, grain by grain, and with it small pieces of dirt, blades of grass, and other things, that all help digestion. Placed before the fowls in boxes filled with grain, the birds do in five minutes that which should be the work of two hours; they eat a greedy fill, and suffering unnatural repletion, they have recourse to drink, the corn swells in the crop, and the sufferers instead of walking about cheerfully, hide in corners and squat about to the detriment of their health. This applies to the equally bad practice of throwing down the food in heaps.

Onions for Poultry.—Scarcely too much can be said in praise of onions for fowls. They seem to be a preventive and remedy for various diseases to which domestic fowls are liable. Having frequently tested their excellencies, we can speak understandingly. For gapes and inflammation of the throat, eyes, and head, onions are almost a specific. We would, therefore, recommend giving fowls, and especially the young chicks as many as they will eat, as often as twice or three times a week. They should be finely chopped. A small addition of corn meal is an improvement.

FARM AND GARDEN.

WEEDS are a terrible pest, and an unceasing warfare must be made upon them or they get the ascendancy, and will then have their own way. Many farmers go through grain crops pulling out the weeds and thus prevent the seeds ripening and spreading upon the land. Oat fields may now be attended to, and the weeds taken out without injury to the growing grain. Weedy meadows should be cut first, especially those overrun with white daisy. This is a very troublesome weed, and when it once gets possession of the soil is hard to eradicate. In passing through the country we see many fields completely covered with this bad weed, and often where there is evidently no pains taken to keep it in check. Lands overrun with daisy do not yield half a crop of grass, and are worth but half so much as adjoining fields of the same quality of soil that are free from weeds. If farmers would join together in neighborhoods and make war in earnest upon the daisy, it could soon be forced from the soil. Where there are but few stalks these should be pulled up by hand but where the number is very considerable they may be kept in check by early mowings, and then by heavy manuring, and the use of plaster and other fertilizers may be completely subdued and extirminated.

We have tried this plan with success. The daisy does not make its inroads upon farms in extensive patches at one time. It creeps in slowly and stealthily here and there, hoping to get a permanent foot-hold before the farmer is aware of its bad character. It is thus early that the weed is easily overcome, but no half way work will accomplish the business. Our plan is to sow clover, manure heavily with barn yard manure, and then plaster; by this course we get a large growth of grass, and "choke the critter off."

One of the worst pests in cultivated grounds on the black slate lands of Herkimer, is quack or couch grass. It soon gets possession of the soil and grows with remarkable vigor. When it fairly gets into the land the labor of getting it out by cultivating and hoeing is of no ordinary character—at least we never enjoyed the sport of hoeing it to death.

A few years ago it got possession of one of our fields, and we battled with it after the following manner: We commenced plowing and harrowing early in June, and continued the work every eight or ten days, until in July, when the piece was rather heavily sown with buckwheat. The hot sun came down and roasted the roots, hauled out upon the surface with the harrow, they gave up the ghost, and what remained the buckwheat smothered to death. A nice large yield of buckwheat was the result of that year's cultivation, and the next season we had a clean mellow piece of ground, with not a vestige of quack in any of its parts. Doubtless in damp, wet seasons, this could not be so thoroughly effected, since many of the roots on the surface would catch and grow, instead of being rooted out.

The hot dry weather of July and August, is a good time to destroy many kinds of weeds, and advantage should be taken of this time to destroy as many as possible. It is true one requires a large share of courage to make the attack on a large and weedy farm, and men do not often get credit for their efforts in this direction. We have seen one man fighting weeds with all his might, while his neighbor seemed to take pleasure in growing them, for the winds to scatter myriads of seeds back again over the farm. We suppose there is no law to reach these cases, and yet there ought to be for the shiftless neighbor is morally guilty of a species of robbery which should be recognized in our statute books.

Some western people are wiser than we of the east, on this weed question. In Wisconsin they have a law making it 'finable for any man suffering certain kinds of weeds to go to seed on his premises, and any one has a right to complain and bring the offender to justice.

Perhaps the day may come when we of the east will become far enough advanced in weed-civilization to have such a law in force. Indeed there is reason to hope so, since we have made one progressive step recently in getting the cattle out of the highway, although we may think this a sad infliction.

The New York Cheese Manufacturers' Association, at their late annual meeting in this city, passed a vote of thanks to those Legislators who were instrumental in getting a milk law. This is all right. Good acts should be recognized and services rendered appreciated, and it would not have been out of place if agricultural societies had made some recognition of the services of those who gave us the blessing of having cattle excluded from the highways.

This weed question is an important one, since also neglect and carelessness on the part of many, are entailing immense waste and injury to some of our best lands. It is true the destruction and extirmination of weeds is an expensive work but then it is not money entirely thrown away since the land is generous and willing to pay back something in increased crops? But one, after a while, gets tired of fighting weeds when farmers about him sow by the help of the winds a little faster year after year than he can destroy. We recently looked over a nice farm, where the large meadows were white with daisies, and the proprietor remarked that he had fought the weeds for years, keeping his meadows clean, but that his neighbors sowed faster than he could destroy, and

so he gave up in despair and let the weeds have their way. This is only one instance out of many, and we begin to hear it asserted that daisy fodder is not so bad after all, for the herds will eat it and thrive. Of course they will eat it when nothing better is presented, but then admitting the point, see the largely increased quantity of land required to winter a cow. These daisy lands are the ones that yield one-half, three-fourths or a ton to the acre, while it takes the clean meadows of timothy or clover to turn out crops of two, three, and four tons. This point, at least, should not be lost sight of.—*Utica Herald.*

NOTES BY S. W.

THE DAIRY REGIONS OF NEW YORK.

A late letter from Chautauque county says: $50,000 a week is now paid out in that county for butter at 30c. a lb. to send to New York city. Here in grain-growing Seneca, butter is selling at 25c. a lb. at the groceries for home use; it will not stay sweet long enough to compete with Chautauque butter in the New York market. Every dog must have his day, and the high cool moist grass regions have it now, as butter and cheese bear a much better market price comparatively than any of the cereal grains. Two cheese factories within four miles of each other have just commenced in the town of Gerry; at one of them 6,570 lbs. of milk made eleven cheeses in one day, cheese 16 inches deep, and the same in diameter; the other factory makes broader and thinner cheese of 80 lb. each. They have much more rain and less frequent drouth in Chautauque than in Seneca county.

A NEAT FARMING REGION.

Here is a man from Holmdel, New Jersey, who says our farming compares very unfavorably with that in the best parts of New Jersey. Every farmer there on the light soils, enriches his domain with green sand, marl and manure; every waste thing is appropriated for manure, by this means the roads are denuded of weeds and thistles, and the whole country blooms in fruition. It is sad to confess that in all arable, fertile Western New York, even nature's bounties are all allowed to run to mischief; not only our roads and fields are filled with weeds, but the streets of the villages and the borders of the Railroads abound in Canada thistles, rag weed, &c. Yet thousands of dollars are raised by a corporation tax in this village, a great part of which is wasted in buying sand and hauling it at great expense to make our hard clay streets into a more adhesive mortar. The only argument in favor of such waste is that it employs the laborer, and eats up the taxes.

A SANDY SOIL THE BEST FOR A GARDEN.

It is true that a clay loam if mechanically treated with decomposing manure will stand a long summer drouth if the surface is hard, better than a sandy soil even if well manured. But this is almost the only real advantage of an alluminous over a sandy soil. If sand requires more nitrogenous manure to keep up its fertility, a light top dressing of clay will do much to prevent the escape of the manurial gasses. Then it is so much more easily worked and quicker to start early vegetation, that it saves in time and garden labor much more than it loses in manure. I take it that it takes at least twice the labor to work a clayey garden, than a sandy one.

But if I was going to grow a crop of Indian corn on a wager, regardless of labor and expense, I would choose a tenacious soil instead of a sandy loam. If the season was wet I might be distanced, but I should be sure to win in a protracted summer drouth. To do this, coarse rich manure must be placed in early, and the surface must be kept loose with the cultivator all through the season; this would mulch the soil, prevent its cracking open, and enable it to hold moisture, but on the other hand the more land is stirred in hot weather the faster it loses moisture.

PIE PLANT, OR RHUBARB.

The pie plant requires deep and heavy manuring to begin with, and liquid manure occasionally to enable it to yield heavily. Its tendency is to increase in roots, and decrease in the size of its leaves after the third year. Hence it should be dug up after the third or fourth year; the root then should be divided, and single crowns set out for new plants. It is so tenacious of life that the root will sprout in a compost heap after they are chopped into small pieces.

THE REASON WHY PASTURES ARE BETTER IN THE HIGHER DAIRY REGIONS.

From a record of the thermometer range, and the amount of rain fallen, kept by a brother in Chautauque county, town of Gerry, I find that they have at least four times as much snow in winter, and twice as much rain during the summer months as we have in Seneca. Our meadows, owing to the heavy spring rains are perhaps not much behind those of Chautauque; but our pastures particularly after the 1st of July will not compare with those of the high land regions, east or west. This season our hay crop will be above the average in spite of the early June drouth as the old sward—bound meadows do not abound in this grain-growing region; but although we have had rain enough for the corn and summer crops, pasture is becoming short from the lack of soaking rains. I find it better to buy clover hay at $8 a ton than to pay for pasture at 7s. a week for a cow.

By way of proverb, English farmers say: Send produce to market on four legs, instead of four wheels.

A FEW WORDS ON THE VALUE OF TREES.

WRITTEN FOR THE GENESEE FARMER BY C. N. BEMENT.

THE associations with the beauty of trees about our country homes enter deeply into the elements of our character; and a hope of what we are about to write may induce some of our readers to plant trees for the purpose of increasing the beauty and the appearance of seclusion and quiet of the homes of their wives and children.

The numerous trees and the still more numerous flowering shrubs which belong to our forests, all capable of being made to flourish in every part of the State, give the planter who is studious of the effects of landscape, inexhaustible resources. Some of the trees grow habitually to the height of only thirty or forty feet; others rise to seventy or a hundred. Grouped in planting, they are capable of giving to a level plain the appearance of any desired inequality of surface. To tall pines, elms and locust at a distance will seem to occupy a hill, the hickories and maples to clothe its sides, while the spreading beeches, broad oaks, and hanging birches, will form the grandest descent to the plain. Among these a winding path leading under or near the largest trees and behind thickets, may give to a few acres all the advantages of variety of a large forest.

It is surprising how small is the number of trees necessary to produce a striking effect. Ten or twelve trees fortunately or skillfully disposed on the sides or brow of a hill, are often sufficient to give an air of richness, harmonizing perfectly with a highly cultivated country. The happy effect of three or four trees on an island gives it a desirable air of seclusion and rest; as if it must be the residence of contentment. One almost covets a house so pleasantly situated. While an unprotected, solitary house seems to shiver in the north wind, and we involuntarily wish for the inhabitants a more cheerful home. Why should not at least one tree be found growing near the dwelling of every man, even the poorest and the humblest?

It appears that the soil and climate of our country are perfectly well adapted to all kinds of wood which are found in temperate countries. It is only necessary to understand the character and habits of each, and to choose suitable soil and situation.

Of many of our trees the properties we but partially know. Some of them grow only in particular districts. Others are so unlike those found in the mother country that they hardly have a name.

Nature points out in various ways that a rotation of crops is as important in the forests as it is in cultivated fields. A pine forest is often, without the agency of man, succeeded by an oak forest, where there were a few previously scattered through the woods to furnish seed. An oak forest is succeeded by one of pine, under the same condition. But it frequently happens that there are not enough trees of the opposite family to seed the ground: in which case a forest will be succeeded by another of the same kind, which, though it will grow, will probably not flourish with the same luxuriance as would one of another family.

The first want is fuel. The trees best suited to the purpose are the hickories, the oaks, the beech, the birches, the maples and the pines, particularly the yellow or pitch pine, and the chestnut and hemlock for close furnaces and boilers. If fuel is to be used in the form of charcoal, the hard woods only are of great value, particularly chestnut, the hickories, the birches, maples, oaks and alders. As materials for house-building, the pines, the spruce, and the hemlock are generally employed. White oak was formerly used for frames, and in many buildings now standing, for more than a century, it has not begun to decay, and is more and more in use. Floors are sometimes made of beech, of birch, and of ash. The best materials probably are white and yellow pine, chestnut and spruce. For ship building the various kinds of oak,—yellow and white,—pine, chestnut and yellow locust and red cedar.

To many persons, the pleasantest season in our climate is autumn, and to the lover of nature the rich and infinitely varied georgeousness of the autumnal woods is a most important addition to the enjoyment of that season in the country. Each tree has its own color, or rather its own class of colors—tints and shade which belong to it, and it alone. Trees to be planted near a residence should be selected in reference to this circumstance, as well as to the time and variety of their formation. Early autumn becomes gay with the vivid crimson of the tupelo and the sumack. A little later come out the rich orange and yellow of the sugar maple, with the gold and scarlet of the red flowering maple. The soft olive tints of the ash, the warm browns of the hickory, the purple of the cornus florida, the buffs and yellow of the birches, gives place at last to the full scarlets yellow and browns of the oaks, many whose leaves remain adhering through the snows of winter. These and forty other trees, and twice as many shrubs, furnish an inexhaustible store-house of colors as they do of foliage. It would be endless to speak of the adjuncts of trees, the climbing shrubs, the Virginia creeper, as remarkable for the richness of its fading colors, the ivy, the bittersweet, with its orange-colored flowers, and the climbers which naturally attach themselves to our trees, and which may be trained upon them in cultivation. All these are studies for the landscape gardener, and add immeasurably to the pleasure of the contemplative man who

dwells in or traverses the country in autumn with the eye of the painter and the feelings of a poet, or with those of a worshiper of the author of these beauties.

Poughkeepsie, July, 1865.

BURNING OLD SODS.

As this is the season for doing this work, we would again call the attention of the readers of the *Genesee Farmer* to the advantages of burning old sods, and converting them into ashes for use in the field and garden. We are satisfied that were ashes more frequently used we should have better vegetables and healthier fruit trees. There are few things so efficacious in checking the spread of fungus—and nearly all the diseases of our agricultural and horticultural crops are caused directly or indirectly by some species of fungus.

We would urge our readers who have the opportunity to burn a few heaps of sods this season by way of experiment.

"The sods are not burnt, strictly speaking, they are simply charred. The "ashes" that are left are mixed with the charred remains of the grass, roots, and other organic matter in the soil. These ashes constitute one of the best fertilizers that a gardener can use. They are free from insects and fungus, and, when mixed with the soil, make it very mellow and porous.

It is not easy to give directions how best to conduct the burning process. A little experience is needed. The dry sods are placed round a little straw and wood, and the fire started. More sods are added as the fire burns. The fire must not be allowed to burn through, and it is this point that tests the skill of the operation. *Morton's Cyclopedia of Agriculture* gives the following directions for conducting the operation:

"It is usual to begin paring early in the spring; if by manual labor, men follow each other with breast-plows, and will turn up an acre apiece in about four days; if with a plow, the field is completed in a little time, and all becomes dry simultaneously. In two or three weeks, the turf, sufficiently dried, is put into small heaps for burning, the sods being losely packed in the center, but closely set together on the outside. The art in burning is to keep a smouldering fire, never smothering it with too much earth, and keeping the outside layer of sods so close as to prevent the fire from kindling into flame. Experience, no less than theory, tells us that the mass should be only scorched and blackened, and by no means burned into red cinders. But actual trial will teach the farmer to do this much better than mere written directions. The ashes should be spread, time allowed for their cooling, and then plowed in with a very shallow furrow to keep them near to the surface. The cost of paring and burning, of course, varies exceedingly, according to circumstances. In paring old sward, from 12s. to 18s. is the cost, and for burning the same, 10s. an acre may be considered a proper sum; the parings being first harrowed over to disturb the furrows, and shake some of the earth off. The spreading of these ashes will cost from 2s. to 4s. an acre, but the most of them are carted off the land, piled up in a heap, and thatched over till the month of May, when, with other manure, they are used as a compost for the turnip crop. In paring light arable lands by hand, as wheat or barley stubble, the cost will of course be less than this, as 7s. or 8s. an acre; and the harrowing after it would be more severe, resulting indeed in the entire separation of the plants from the earth, the former being in general raked together and burned by day labor. But paring, especially in this case, is properly work for horses—not for men. One of the best modern paring-plows will pare the land as true as with the breast-plow, taking twice the width of a common plow, yet drawn by only two horses.

"In breaking up the sandy and chalky downs of Wilts, Hants and Dorset, the following mode has been found to answer better than any yet devised: Pare the sward as thin as possible with the breast-plow; burn in small heaps at equal distances on the land, care being taken that the turf is not too dry; the ashes being much richer when it smoulders away than if burned quickly. * * * On loamy soils, paring and burning has proved a most successful method of breaking up grass-land—destroying the roots and seeds of weeds, reducing to ashes the turf would cover the land in the shape of lose sods, and render it too 'hollow' for a wheat crop; producing valuable manure, in the form of burned soil and charred vegetable matter, and killing the insects that would devour the first produce.

Clay-burning is a process of long standing and renown, of undeniable and extraordinary benefit, precisely the improvement required upon many thousands of acres, yet hitherto applied in very limited areas."

MR. DUREN, of Woburn, Mass., writes the *New England Farmer*, that he cures his hens of sitting by shutting them in a tub with an inch or two of water on the bottom, during the day. Puts them on the roost at night, and if not cured treats them to the water remedy for another day, and they will be glad to stand on their feet.

TAKE care of the plows. While they are idle during harvest, see that they are well cleaned and covered with a coating of lard and resin.

FOREST TREE CULTURE—NO. 2.

EDS. GENESEE FARMER:—When it is desirable to make or form a new forest it will depend for size on the quantity of land the owner may occupy. We should not be deterred from embarking in an enterprize so laudable and useful though but an half acre could be applied to the purpose.

Where land is scarce and of a high price, select such a locality as may be best fit for tillage—gullies, broken and uneven ground, or such as is stony. Let the ground be well plowed and pulverized by harrowing. Glene in October or as soon as acorns, nuts or other seeds of trees drop, sow them either broadcast or by drilling—one seed to each square of two feet or closer, and then harrow with a light implement.

Should but little or no snow fall in the locality during winter a mulching of leaves, straw or any any other matter that will cover the soil, will be required. As the kernel in sprouting strikes its roots into the ground the coteledon strikes up during winter, and unless protected by mulching may be killed in the winter. See how nature protects them during the hard freezings by mulching with the foliage of the trees. And it would be well perhaps indispensable, to keep the ground mulched several seasons, particularly if the finely-rooted grasses appear, unless the seeds have been planted in rows, then it could be plowed, which must be shallow so as not to disturb the spongioles. Positively admit no animals. Should the grasses not intrude the growth of weeds, briars, &c., will be no hurt, but a help. As the young trees progress they will crowd each other—this is necessary to make them straight and lofty. They will prune the lower branches themselves, and as they branch, the weaker ones will decline—and no more than can conveniently grow will remain. But the lopping off of the lower limbs and removing of those that decline the prudent husbandman will attend to with his own hands. It is almost incredable what number of trees will grow to great size, particularly in height on an acre. The poplar, white pine, tamarack, and many other kinds will not require more than fifteen feet square. This would admit of one hundred and eighty-three to one acre!

As respects the varieties for the formation of the forest, much depends on the object the planter has in view. If utility be the object—the various oaks, hard maple, hickory, ash, poplar, lin, black and white walnut, and the chestnut with others among deciduous trees are worthy of cultivation. Among the evergreens the white pine stands foremost, the red cedar, hemlock, and others should be admitted.

Where utility and taste are combined, all the trees of the forest indigenious to the section in which the plantation is to be made should have a place. Yet respect should be had to the nature and position of the variety. The chestnut with some others flourish best on high sandy ridges—the swamp, burr oaks, black ash on low ground—the white pine on high, sandy and dry hills, yet some grow luxuriantly in swamps. The black locust, red cedar and mulberry for their qualities in durability deserve to be cultivated. The wild cherry too is valuable. But each person or association must determine the kinds they desire to rear.

The chestnut, black and white walnuts and hickory, are full worth cultivating for their good nuts. But mingled with other trees in a forest they bear not near so abundantly as when isolated. But their timber is valuable—the more so when grown in a forest, because more lofty and clean of limbs.

Sodus, Mich., July, 1865.

FOOT ROT IN SHEEP—AGAIN.

EDS. GENESEE FARMER:—With all that has been published in regard to foot rot in sheep it yet prevails, for when once introduced it requires time and the closest attention to dispose of it. The virus or innoculation is left from the diseased foot on the grass, and is removed only by severe frost, or heavy dews. On the first appearance of the disease there is a watery mucus gathering between the hoofs, and in a few days it works in between the hoof and the frog of the foot, and if not attended to in a few weeks the hoof becomes loose, and falls off. The farmer that has but a small flock should provide himself with a sharp knife and blue vitrol. Dissolve the vitrol in water as strong as it can be made. Put the sheep on a dry floor. Examine every foot. Those that are diseased pare off all of the hoof that is loose from the frog of the foot. This requires close attention, then dip the foot in the prepared vitrol. So dip every foot diseased twice a week for six weeks, put them into a field that has not been occupied by diseased sheep, and a cure will be effected. If the flock is more than fifty, prepare a trough twelve or fourteen feet long, ten inches wide, flat on the bottom, fill it two inches deep with the prepared vitrol, yard the sheep in a dry yard, at the opposite end make a passage way that only one can pass out at a time. In this way place the trough after they have all passed through drive them a few rods. Every one the least affected will go lame. Take all such and examine every foot where the disease is found, treat as above, go on so twice a week for six weeks, and if kept where no disease has been, a cure will be effected. One great difficulty in effecting a cure is letting them run on grounds where the disease has been left for weeks before.

Wheatland, N. Y., July, 1865. R HARMON.

SCOURED FLEECES FROM MERINO AND COTSWOLD SHEEP.

REPORT OF COMMITTEE OF THE NEW YORK STATE SHEEP AND WOOL GROWERS' ASSOCIATION ON SCOURED FLEECES.

HON. HENRY S. RANDALL, *President New York Wool Growers' and Sheep Breeders' Association:*

"THE Committee entrusted with the duty of awarding the premium offered by Hon. D. D. T. Moore 'for the fleece of one year's growth, or thereabouts, which on being cleansed, shall be found to give the greatest weight of wool, in proportion to its time of growth and to the live weight of the animal,' submit to your Association the following Report:

"On the 11th day of May last, at Canandaigua, fifteen sheep were shorn in competition for Mr. Moore's premium—five of them rams, ten ewes. All of these sheep, except one Cotswold, were Merinos. The liberal offer of $50 for the heaviest fleece of wool, to be tested by having it cleansed as wool is cleansed by manufacturers, excited much interest among breeders of sheep and the public generally. The fifteen sheep that competed were, it is to be presumed, supposed by their several owners to be as good as could be produced; and it is quite probable that in the main they were correct in this opinion, though in some instances the result of the cleansing shows to the contrary.

"The true value of a fleece of wool must depend on its quantity and quality. Mr. Moore has asked for a test of only one of these points—quantity. It is perhaps well that he confined himself to this single point, for by so doing a breeder of Cotswolds, Mr. Gazley, was induced to compete. The well-known fact that the sheep that produce the coarser wools give fleeces that shrink much less in cleansing than the finer wools, has led many persons to believe that, of clean wool, the so called mutton breeds produce nearly or quite as much, in proportion to their weight, as the fine wooled sheep. The opinion was freely expressed on the Fair Grounds that the Cotswolds would win the prize. It is to be regretted that the mutton breeds had not been more fully represented, that the comparison could have been more complete than it now is. We will venture to express the hope that in future trials more of this kind of sheep will compete, and if necessary to induce this competition, that premiums be offered for the fleeces not only of fine wooled sheep, but for the fleeces of the breeds raised principally for mutton. This might involve, perhaps, three classes, viz., fine wooled sheep, long wooled and middle wooled sheep.

"We feel confident that Mr. Moore's plan of having the true weight of the fleeces determined by positive tests must lead to important results in instructing both wool grower and wool manufacturer, and lead both branches of the common interest engaged in producing the clothing of our people to a better understanding of the facts involved. The wool grower desires to get the most he can for the produce of his flock—the manufacturer as naturally desires to get as much wool for a given sum of money as he can. However disposed the parties may be to deal fairly by each other, they will fail to come to an understanding, mutually satisfactory, unless they are both in possession of a knowledge of the facts in the case. It may be true that much labor and cost is involved in cleansing fleeces and making the necessary figures to determine the relative merits of a great many of them, but knowledge in regard to so important a matter is worth the price.

"It is due to your Association and the competitors that the processes adopted by us in the discharge of our duties should be set forth. Mr. Goffe, one member of the committee, is the manager of the Syracuse Woolen Mills, and under his immediate direction the fleeces were cleansed. His statement of the manner is by him given as follows:—'The wool was washed by taking 16 pounds of soda ash and 32 pounds of salt, dissolved in 150 gallons of water in a large tub. I then took a small tub and dipped out a sufficient quantity to wash one fleece, then put in the fleece and scoured it in the small tub—then took out the wool and discharged the liquor, and washed each fleece in this manner, so that none of the wool was lost, wasted or mixed with the other. In drying the wool we laid it on a cloth on the wire screen over our dryer, (which is inside the mill,) so that none of it was lost in drying. The strings were kept with each fleece and put with them when weighed after scouring.'

"These precautions appear to make it certain that there could be no error or unfairness in the process, and the result was that the wool was scoured, as Mr. Goffe says, 'as we would for manufacturing—that is, we take out all the animal oil, or "*nature*" as we term it, which is necessary in order for the wool to take color in dying.'

"The wool thus cleansed was carefully weighed, and then the weights, together with the weights of the uncleansed fleeces, the time the wool was growing, the live weights of the shorn animal, and the other facts necessary, were placed in the hands of Mr. Homer D. L. Sweet, a member of the committee, and by him the table that accompanies this report was made. This table shows by inspection the whole matter—placing the competitors in the order of their merit. The work of making this table was considerable, and Mr. Sweet's associates on the committee feel under great obligations to him for having taken it on himself. His manner of making the computations he describes as follows:—'Divide the weight of the scoured fleece by the number of days it was growing. This gives the amount produced by the animal in a day. Divide this small fraction by the live weight. This gives the amount grown by *one pound* of animal in *one day:* multiply this fraction by 365 and it gives the amount grown by one pound of animal in a year, (this is the figure that decides who has won,) and this, multiplied by the live weight of the animal, tells how much it would produce in a year. This last operation proves the three foregoing calculations. The per-centages of fleece to live weight, and of scoured wool to live weight, are computed in the usual way.'

"By this process Mr. Sweet has made a table that gives at a glance all the facts necessary to decide who has won the premium, and the exact standing, in all particulars, of each competitor in the contest. By simply reading the first line it appears that Addison H. Clapp, (who stands at the head of the list,) had a ewe that was two years old, in fair condition—weighing forty-nine pounds—that sheared a fleece that weighed (as it came from the animal,) nine and eighty-five hundredths of a pound—that it cleansed four and seventy-five hundredths of a pound of wool—that the uncleansed fleece weighed twenty per cent. of weight of animal—that the scoured wool was nine and six-tenths per cent. to weight of animal. The scoured wool to shorn fleece, is forty-eight per cent.—making the loss in cleansing fifty-two per cent. The age of the fleece was 367 days; the quantity of wool produced in a day by the animal was .01294 of a pound; the quantity of wool produced by one pound of animal in one day is .000264; the quantity produced by one pound of animal in a year is .09636, and the quantity produced by the animal in a year would be 4.72 pounds. This is the standing, as appears by the table, of the prize animal.

"To contrast this animal with one of the same age, sex, breed and condition, we will take Mr. J. C. Sweet's ewe, No. 12 in the order of merit. Mr. Sweet's ewe was two years old, in fair condition, weighed 78.5 pounds—fleece 17.5,—the scoured wool 5.31,—per-centage of fleece to live weight, 22.2—per-centage of scoured wool to live weight, 6—per-centage of scoured wool to fleece, 30.3—per-centage of shrinkage, 69.7. This comparison followed through will give the whole case.

"It may be well to institute some comparison between two rams. We will take Mr. F. Gibbs' No. 5, and L. J. Bovee's No. 13. Mr. Gibbs' ram was one year and one day old, in good condition; he weighed 50.5 lbs. His fleece weighed 11.31 pounds—it scoured 3.97—the per-centage of fleece to live weight was 22.3—the per-centage of scoured wool to live weight is 7.6—the per-centage of scoured wool to fleece is 35.1—the per-centage of shrinkage 64.9. Mr. Boven's ram was a year and fifteen days old, in good condition, weighed 108.5 pounds, sheared 18.09—scoured wool, 5.18—per-centage of fleece to live weight, 16,—per-centage of scoured wool to live weight, 4.7—per-centage of scoured wool to fleece, 28.6—per-centage of shrinkage, 71.4.

NAME OF OWNER.	Order of Merit.	Sex of the Animal.	Age in years and days.	Condition of the Animal.	Weight of Animal.	Weight of fleece shorn.	Weight of scoured wool.	Per cent. of fleece to live weight.	Per cent. of scoured wool to live weight.	Per cent. of scoured wool to fleece.	Per cent. of shrinkage.	Age of fleece in days.	Quantity produced in each day.	Quantity produced by one lb. of animal in one day.	PRIZE COLUMN. Quantity of wool produced by 1 lb. of animal in a yr.	Quantity produced by each animal in one year.
A. H. Clapp,	1	ewe	2.	fair.	49.	9.85	4.75	20.	9.6	48.	52.	367	.01294	.000264	0.09636	4.73
L. J. Bovee,	2	ewe	.356	fair.	53.	11.21	4.50	21.1	8.4	40.1	59.9	356	.01264	.000238	.08687	4.60
Wm. M. Holmes,	3	ewe	1.43	good.	47.	8.97	4.43	19.	9.4	49.3	50.7	408	.01085	.000230	.08395	3 94
D. W. Percy,	4	ewe	2.	"	63.50	14.43	5.12	22.7	8.	35.4	64.6	373	.01372	.000216	.07884	5.
M. F. Gibbs,	5	ram	1.1	"	50.50	11.31	3.97	22.3	7.6	35.1	64 9	366	.01084	.000214	.07811	3 94
Josiah Tatt,	6	ewe	.331	thin.	38.	7.03	2.28	21.3	6 9	32.4	67 6	331	.00688	.000208	.07592	2.50
O. S. Williams,	7	ram	2.	thin.	61.	10.81	4.47	17.	7.3	41.3	58 7	368	.01214	.000199	.07263	4.43
E. Gazley,	8	ewe	1.20	fat.	99.50	8.90	7.31	8.	7.	82.	18.	385	.01898	.000189	.07098	7.06
Arnold & Green,	9	ewe	2.	good.	55.50	9.15	3.59	16.	6.2	39.2	60.8	336	.01068	.000192	.07000	3.88
P. H. McMillen,	10	ewe	1.4	fair.	68.50	12.42	4.81	18.	7.	38.	62.	369	.01303	.000190	.06935	4 75
Theron Steele,	11	ram	1.60	good.	77.50	15.72	6.25	20.	8.	39.1	60.9	425	.01470	.000188	.06862	5 31
G. S. Center,	12	ewe	1.347	fair.	54.50	10.25	3.33	18.	6.1	32.4	67.6	341	.00976	.000179	.06533	3.56
J. C. Sweet,	13	ewe	2.	"	78.50	17.50	5.31	22.2	6.	30 3	69.7	376	.01412	.000179	.06533	5.12
A. J. Blood,	13	ram	4.	good.	95.	20.09	6.56	21.	6 9	32.6	67.4	385	.01703	.000179	.06533	6.20
L. J. Bovee,	13	ram	1.15	good.	108.50	18.09	5.18	16.	4.7	28.6	71.4	330	.01363	.000125	.04562	4.94

"In this connection we will take the Cotswolds. Mr. Gazley's ewe No. 8, one year and twenty days old, fat, weighed 99.5 pounds—fleece as shorn, 8.9 pounds,—scoured wool, 7.31 pounds—per-centage of fleece, *only* 8, while percentage of scoured wool to live weight of animal is 7.—per-centage of scoured wool to fleece, 82. —per-centage of shrinkage, 18, which is only about one-third as much as that of the prize animal. Mr Bovee's ram, though a Merino, produces more weight of animal in a year than Mr Gazley's Cotswold ewe, but much less scoured wool,—and this ram weighs more than twice as much as the prize ewe, sheared twice as much fleece, and in the prize column stands less than half as high.

"Masses of figures present few attractions to most people,—but we suggest to producers of wool and mutton a careful study of the table we give, being confident that useful information will be derived therefrom. We will content ourselves with one more comment.

"It will be at once seen that the small sheep have greatly the advantage in the contest—not that the very smallest sheep prove the winner, but the rule, in the main is proven to be true,—that small sheep, having more surface in proportion to their weight, do give more wool per pound of body. This is entirely in accordance with the elaborate tables made by Mr. Sweet of the weights of animals and fleeces as shown in his own flock. His tables have been extensively published, and the lessons they taught is confirmed by our investigations."

"*For the mere purpose of wool raising very large sheep are not desirable.*"

Respectfully submitted by

GEO. GEDDES,
HOMER D. L. SWEET,
A. J. GOFFE,
JAMES L. ELLIS,
CHARLES TALLMAN.

July 8th, 1365.

It will be seen that the fleeces from the fourteen Merino sheep weighed 176¾ lbs.,—and after cleansing only 64½ lbs. In other words, 100 lbs. of fleece contained 64 lbs. of worthless matter, and only 36 lbs. of real wool.

On the other hand, taking the only coarse wooled sheep shown,—that of Mr. Gazley's Cotswold ewe—it will be seen that 100 lbs. of such fleece contains 82 lbs. of real wool. In other words, 100 lbs. of Cotswold fleece, contains as much wool as 227 lbs. of Merino fleece.

The figures in the last column but one determined the award. It will be seen that the highest produce of scoured wool in proportion to live weight, calculated for a year, was a little over 9½ lbs. to a hundred lbs. weight of animal, and the lowest was 4½ lbs. The *average* of the fourteen Merino sheep shorn was nearly 7½ lbs. of scoured wool to 100 lbs. weight of animal, in a year.

In the last column we have the amount of cleansed wool produced by each sheep in a year. The highest was Mr. Gazley's Cotswold ewe, which produced a little over 7 lbs. of wool. The Merino sheep which obtained the prize produced a little less than 4¾ lbs.

The chief interest of this trial centers in the comparison of the Merino and Cotswold sheep. Comparatively few are interested in knowing which particular breeder happens to have a Merino sheep that affords a trifle more wool than another Merino of the same breed. The fact has no special importance. But we would all like to obtain reliable information in regard to the production of wool in proportion to live weight, of the different breeds of sheep, and it is a matter of regret that only one sheep of any breed except Merinos was shown, and this a yearling Cotswold ewe.

This Cotswold ewe produced 7 lbs., of cleansed wool in a year, for 100 lbs. live weight, while the average of the Merinos was 7½ lbs—the highest being 9½ lbs, and the lowest 4½ lbs. It seems to be taken for granted that the sheep eat food in proportion to live weight—and to a certain extent this is probably true, where the sheep have the same general characteristics, but whether true of "mutton sheep" as compared with Merinos may be considered an open question. But admitting that this is the case—that a Cotswold sheep will eat as much as a Merino in proportion to live weight, it is a very important point to determine what is the real "live weight." In Mr. Lawes' well-known experiments with the different breeds of sheep—and which showed that the different breeds of mutton sheep consumed

food in proportion to live weight—the live weight was determined by taking the *mean* of the weight of the sheep at the commencement, and at the end of the experiment. But in the trial at Canandaigua the "weight of animal" represents merely the weight at the time the fleece was sheared, and does not represent the mean weight of the sheep during the period of the growth of the wool. It is true that it would have been difficult if not impossible to have ascertained the mean weight of the sheep during the year, but it is manifestly unfair to merely take the weight of the sheep at the time of shearing. For instance the Prize sheep was a Merino ewe two years old, which weighed 49 lbs., and the calculation which determined the award is based on this figure. In other words it is assumed she weighed 69 lbs. during the year the wool was growing. On the other hand the Cotswold ewe was 1 year and 20 days old and weighed 99½ lbs., and the calculation is based on this figure. In other words it is assumed, in this case as is in the other, that the sheep weighed 99½ lbs. during the whole time. This is manifestly unfair. Let us assume that a year ago she weighed 5½ lbs., and that she gradually increased till she weighed 99½ lbs. at the time of shearing. Her mean weight during the year would be 52 lbs.

On the other hand if the Prize Merino ewe weighed 49 lbs. when *two years old*, it is highly probable that she at least weighed 25 lbs. a year ago. Her mean weight, then, for the year while the wool was growing would be 37 lbs. Now as she produced 4.75 lbs. of scoured wool, it will be found that 100 lbs. weight of animal would produce less than 12¾ lbs. of wool, while a similar calculation will show that a Cotswold produced, for 100 lbs. of average weight of animal, 14 lbs. of scoured wool. So that in point of fact the Cotswold produced more wool in proportion to the real weight of animal than the Prize Merino sheep.

SETTING FENCE POSTS.—Where it is necessary to set wooden posts, it will be found that their durability will be greatly promoted by slightly charring or carbonizing the surface before inserting them in the soil. There are few substances more indestructible than charcoal when buried beneath the surface and kept constantly in contact with moist soil, or soil that is constantly wet. We have seen posts thus protected, taken from the soil after having stood upwards of thirty years, in perfectly sound condition, so far as rot was concerned, below the surface, while the upper part, which had been exposed to the atmosphere, was in a state of complete decay. The cost of charring is but a trifle, and may be effected by means of chips, brush or refuse matter of any kind. A very slight charring will be sufficient to insure the preservation of most kinds of wood whether hard or soft. Stakes are also equally benefitted by this process.—*B. C. W. in Germantown Telegraph.*

SURFACE MANURING.

MUCH has been written in praise of surface manuring within the last few years. On every new topic men are apt to allow their minds to run to extremes. We have no doubt that surface manuring may be practiced with benefit within certain limits. On low, wet lands, where the soil is very thin, we should advise this mode of practice. We have seen the heaviest crops of grass from this method, of any we ever witnessed. The freshets that overflow our intervales will often leave a sediment from which the largest crops of hay are realized. On the other hand, we believe that a large per cent. of the manure is lost by top dressing on dry land, and especially with loam manure. We saw a curious illustration of this a few years since. A neighbor kept a horse and cow, and not being in a situation to make use of the manure in cultivation, he ordered it hauled out and spread in an old orchard. The consequence was that the ground became completely bound out. Instead of a large crop of grass as was anticipated, it actually diminished. Since then he has plowed in his manure, and has received heavy crops.

We recollect of top dressing a piece of sandy loam with muck directly from the swamps. The consequence was that a few stalks of herdsgrass grew very tall, but there was no thickening up of the grasses on the surface of the ground. It may be regarded as a fixed rule, that plants of rapid growth, like those of our cultivated crops, require the manure to be incorporated with the soil to insure their quick development. Trees grow rapidly where there is a covering of vegetable mould upon the surface of the earth. A covering of partially decayed leaves prevents the evaporation of moisture from going on so rapidly, while their slow but uniform decay furnishes food for the trees. Hence the advantages of mulching trees.

We know of no better condition in which to secure a good crop, than by thoroughly incorporating an abundance of manure with the soil. Merely plowing in manure is not always the best economy. We have seen horse manure plowed under a green sward early in the fall where it became a dry and inert substance of no sort of value to a future crop.

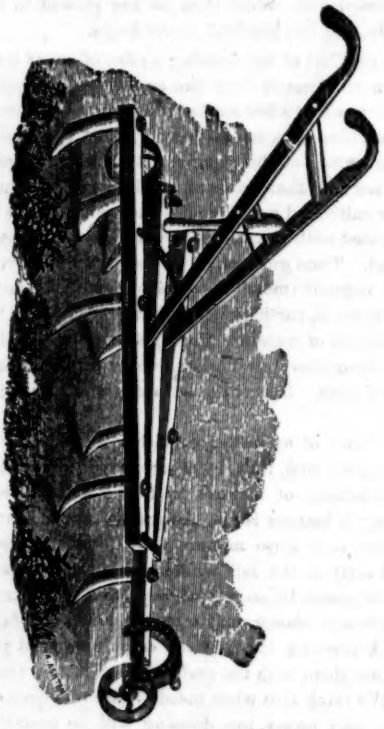
Ashes and plaster may often be found beneficial as a top dressing, but in these cases we should prefer to use them with the grain crop and harrow them in. We think that when meadows are well drained, and of easy access, top dressing will be practiced more than heretofore in this State.—*Maine Farmer.*

SAVE the seeds. Look well to this subject. Select the best of every variety as they ripen—cure properly, label, and store away for future use.

AGRICULTURAL IMPLEMENTS AND MACHINES—NO. 2.

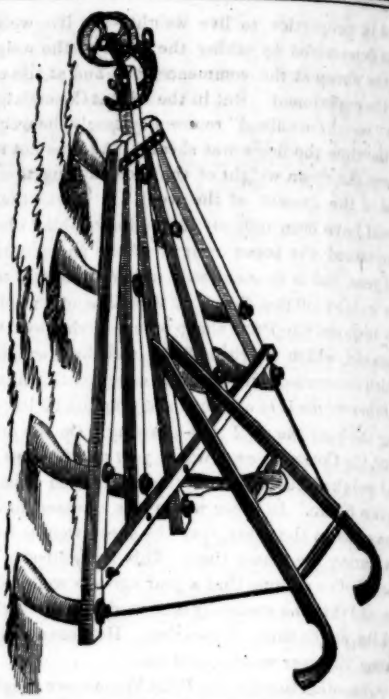
We present the readers of the *Genesee Farmer* this month engravings of two of the most useful implements we are acquainted with. They are manufactured by the Remington Agricultural Works, at Ilion, Herkimer county, N. Y. One is the Johnston Cultivator, for working among corn, beans, potatoes, &c. It is named after our esteemed correspondent, John Johnston, of Geneva, N. Y., he having suggested several improvements in the form of the teeth, &c., which were made from time to time after being tried on his farm, till the desired shape was obtained. For working in heavy soils there is no cultivator equal to it, and we know of none better for general use on all soils. The teeth are made of steel, and, as the engraving shows, are quite narrow, which enables them to penetrate and mellow the soil to a considerable depth.

Steel mould boards, for hilling, can be attached to the cultivator by removing three of the teeth. In this form it works most admirably.



THE JOHNSTON CULTIVATOR.

The Remington Two-Horse Cultivator we have used to a considerable extent, and can commend it as a valuable implement for preparing land for wheat and other crops. The teeth are narrower and strike the ground less abrubtly than the ordinary two-horse cultivators in use in this section. It is not so hard on the horses, and does better work.

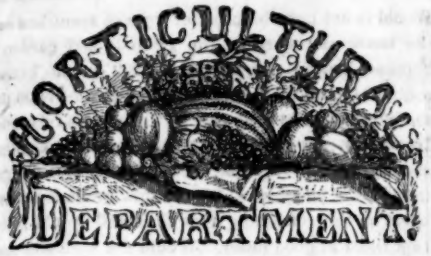


THE REMINGTON TWO-HORSE CULTIVATOR.

It would be well if more of our agricultural implement manufacturers would take the course adopted by the Remingtons in getting up their implements and machines. This Johnston cultivator is the result of repeated trials on the farm of Mr. Johnston, and it is almost impossible to construct a perfect implement without such trials. The intelligent, practical farmer can often suggest improvements which would add greatly to their efficiency.

In this connection we may be allowed to repeat an anecdote in regard to Mr. Remington. Last spring when on a visit to John Johnston, after considerable talk with him, and when about to ask another question, we expressed the fear that we should tire him. "Not at all," he said. "I never was tired of talking agriculture but once. Old Mr. Remington—and a fine man he was, too—came up here and we talked all day about agricultural implements, and by night *I was a little hoarse;* and that is the only time I ever got tired." Let agricultural manufacturers adopt this course, and a marked improvement will soon manifest itself in our implements and machines.

Glycerine is the best article for curing cracks in cow's teats. Apply it twice a day after milking.



GARDEN WORK FOR AUGUST.

THE weather this season, in the vicinity of Rochester, has been quite favorable for the garden. Rather cool, perhaps, for melons, sweet potatoes, and other semi-tropical plants, but very comfortable for the laborer, and the earth has not been parched, vegetation has not been withered by such a drouth as prevailed a year ago.

It has not been such a season to kill weeds as the last, but then if weeds have flourished, so have useful plants. It only required more labor, and the larger crops resulting from an abundance of moisture, will repay all extra labor.

The crops of *small fruits* were fine, but the prospects for *large fruits* is decidedly unfavorable. Peaches and apples must have been killed when in bloom, I think, by frosts or some other cause. Pears look well about here, but I hear of short crops elsewhere. Grapes are beginning to mildew in many vineyards. Science must arouse herself, or this once fruitful region, will be destitute of that most wholesome luxury.

Asparagus.—Pass over the bed occasionally, and cut out those stalks that are going to seed.

Beans.—Pole beans should be pinched off when about six feet high. Limas should be picked, shelled, and eaten when green.

Cabbage and Cauliflower.—Hoe often, but draw no earth to the plants.

Celery.—Hoe often, drawing a little dirt around the plants.

Corn.—Leave the largest, earliest ears for seed.

Cucumbers—Should be picked over often for pickles, allow none to ripen on the vines, as it renders them less fruitful.

Melons.—Pick off all but five or six to a vine, and you will get much finer fruit.

Onions.—When ripe should be pulled and dried, before laying away for winter. The latter part of the month sow seed for an early crop next year.

Potatoes.—Early ones are ripe, and should be dug as soon as the vines are dead, and if to be kept for winter, put in a cool place.

Tomatoes.—Gather as they ripen—use freely, can, bottle, or jug them, and they will come good next winter. Watch for the tomato worm, which can be detected by his droppings under the vine.

Turnips.—The different varieties of the flat turnip, can be sown through the most of the month.

Spinach.—Sow the latter part of the month for early spring use. Make the ground rich.

STRAWBERRIES.

If not too dry, August is a good month to make plantations of strawberries. They will get well rooted before winter, and bear a pretty fair crop next year. The old tried sorts, such as the Early Scarlet, Wilson, Triomphe d' Gand, Hooker, &c., are not superceeded yet by any of the new candidates for popular favor.

Raspberries and Blackberries—Should be thinned to four or six canes, and the dead ones removed.

Grapes—Should be watched, unnecessary branches removed, bunches thinned, &c., &c. P. C. R.

EARLY TOMATOES WITHOUT A HOT-BED.

EDS. GENESEE FARMER:—In the July number of the *Genesee Farmer*, I see an inquiry made by Mrs. John Miller, of Galt, C. W., asking "how to raise tomatoes very early without making hot-beds." Now I would like to give her my wife's mode of culture, and perhaps it may be of use to some others. The 1st of March she takes a box filled with light soil (which she has obtained in the fall) sows the seed, keeping the box in a room which is always warm from a stove in the adjoining room, and the plants have the morning sun. When the plants are about three inches high she transplants them into boxes made of thin boards wider at the bottom than the top (say six inches square, and five inches square, and seven inches high, without the under boards being fast, as by that means the plants can be moved from the boxes to the place in the garden better) keeping them in those until the spring frosts are over, then the ground being prepared, the holes dug, the boxes are slipped into the holes, tapping the side of the box so as to let the plant fall down, and the box be raised up over the plant, close the soil round the tomato, and the work is done. The plants will not know that they have been moved. They can be kept in the house if needed until fruit is set. My wife will have ripe tomatos by the 1st of August—or may be the very last of July. She has the best success of any one in this vicinity. There is a small white worm that troubles the plants when they are getting the second leaves, but if some snuff or tobacco is shaken on will stop their work, for the tomato plants raised in the house are the best, for they are stronger than hot-bed plants.

H. R. D.

Belmont, Allegany county, N. Y., July 10, 1865.

THE FARMER'S "DOOR YARD."

"WHAT a nice front yard you have," said a young farmer to a friend of ours a few days since. "You have the most beautiful flowers I have ever seen."

Part of this may have been mere compliment, as the "door yard" in question will not compare with an ordinary suburban lawn and garden. But as it happened to be a *farmer's* door yard, and is not utterly neglected, it called forth the remark we have quoted.

The young man is the eldest son of one of the most successful farmers in the neighborhood. Coming to the "Genesee Country" when it was to the resident of the Eastern States as far "West" as Kansas is now, he cleared a farm, raised a large family and gave them an excellent education. He has plenty of apples, cherries and peaches, and we are not sure that he has not what is quite rare in a farmer's garden, a good patch of the best varieties of strawberries and raspberries. The house is delightfully situated, with some noble deciduous trees and fine evergreens surrounding it. The young ladies are fond of flowers, and succeed pretty well with their annuals. There is a bell on the front door, a piano in the parlor, with half a dozen or so oil paintings on the walls, the work of one of the daughters. Ten different periodicals are taken and a pleasanter country home is seldom found.

Now why should not such a farm have a well kept lawn, with a few choice shrubs, evergreens, ornamental trees, &c. Has he not land enough? Can he not afford it? What would it cost? Would not a hundred dollars a year be a liberal estimate, even charging full price for every half hour occupied in keeping it in order. We think fifty dollars a year would convert some of the unsightly door yards, so frequently seen in the country, into a delightful lawn. And there is positively no reason why this is not done, except that the farmer has never been in the habit of attending to such things and has no taste for them. If a man is really poor, there is some excuse for neglecting those things which do not afford an immediate profit. But we have in all parts of the country hundreds of thousands of farmers who can afford to have a nice lawn and garden if they only desired it. Here is a farmer who has spent over $10,000 in erecting a house. His "door yard" is—well, no better than his neighbors. Perhaps he would be talked about if it was. A big house is allowable in the country, but the agricultural Mrs. Grundy would be horrified should a farmer pay much attention to ornamental grounds. But what is the good of the big house with its neglected "door yard?" Does the good wife feel any happier in it? Are the children more comfortable? Does it afford any pleasure to the passer-by? Would it not have been better to have spent less on the house and more on the grounds and garden? Suppose, instead of spending $10,000 on the house and nothing on the grounds, he had spent $7,000 on the house and reserved the $3,000 for making and keeping up a nice lawn, planting out a few hedges, making good walks and setting out ornamental trees. Had he spent $1,000 on his grounds the interest on the remaining two thousand would have kept them in good order. Would not such a course have been better? Admitting that it does not pay, we would ask how much the extra $2,000 invested in the house pays. It not only brings in nothing, but requires more money to furnish the rooms, &c. And in case you want to sell it, who would not prefer to have had the money invested in setting out trees, &c., than in the house?

Not many months since a rich gentleman in one of the Eastern Cities, wanted to buy a farm for his son. He preferred Western New York. He was willing to pay any sum from $20,000 to $60,000, if he could get such a farm and buildings as he wanted. But he wanted everything ready to his hands—a pleasant house, good buildings, and well laid out grounds, roads, &c. We were asked where there was such a farm in this section that could be purchased; and we were obliged to confess that we did not know of any in this neighborhood that would fill the conditions. We have many farms in a good state of cultivation, many good houses, but where do you find well laid out grounds? We are confident that there are farms where a thousand dollars spent ten years ago in judicious planting, with a hundred dollars a year in keeping up the grounds, would have added, in this case at least, from five to ten thousand dollars to the value of the farm. But this is not the main reason for attending to these matters. We want farmers to make pleasant homes for their children. This young man who admired a "door yard" kept a little better than is generally found on farms, is already anxious to leave his father and go to the city. He thinks farming nothing but hard work, and sighs for some pleasanter occupation. We think he had better stay on the farm. A man who gets an honest living in the city has to work just as hard as farmers, but he does not realize this, and it must be confessed that we find, even among those in moderate circumstances, pleasanter homes in the suburbs of our cities, than in the country. This need not be. A farmer can make his home pleasant to himself and attractive to his children. Agriculture needs intelligent young men, and especially intelligent farmers' sons. We must make farming more agreeable. But this is a subject we cannot discuss at this time. What we now wish to urge upon our readers is the importance of paying more attention to their grounds round the house.

THE CURRANT WORM.

During the discussions at the late meeting of the Fruit-Growers' Society at Rochester, we were surprised to hear three different members, men of great intelligence, state that the perfect insect of the currant worm is a small yellow or orange colored *fly*. As this opinion seems to be a common one, it may perhaps be regarded as a sufficient correction, to refer to Dr. Fitch's Third Report to the New York State Agricultural Society, page 109, where the perfect insect is described as a moth [or "miller,"] "of a pale nankin yellow color, the wings with one or more faint dusky spots behind their middle in the male, and in the female with an irregular band crossing both pairs." The wings measure from tip to tip about an inch and a third. These insects have been repeatedly obtained from the worm, removing all doubt as to their appearance and character; and they may be seen in abundance hovering along currant rows in summer, where the larvæ have been permitted undisputed sway.

We have never known the sprinkling of white hellebore on the leaves to prove a failure. As a general rule, *repellants* of insects are of little or no value, but those remedies only are efficient which *kill*. The powdered white hellebore effects this result immediately, as soon as the worms take the first dose, no matter how thinly it has been sprinkled over the leaves from the finely perforated dredging-box. P. Barry stated at the Fruit-Growers' meeting above mentioned, that he found it better to make a solution of the hellebore in water, and throw it on the leaves with a syringe. There may be other poisons that will answer the same purpose, but none appear to have been tested—although we have heard that a solution of copperas, the water being 30 or 40 times in weight that of the copperas, had been found effectual, but farther trial is needed to prove it of value.—*Country Gentleman.*

We have not now time to reply to the above as fully as the importance of the subject merits. It is common to speak of the worms that devour the leaves of the goose-berry and currant in this and some other sections of the country as "caterpillars," and as "flies" do not produce caterpillars, our friend of the *Country Gentleman* thinks we are in error in speaking of the insect as a "fly." This would be a conclusive argument provided it was established that the currant-worm is a caterpillar.

There *are* caterpillars that devour the leaves of the gooseberry and currant bushes. We have observed them on our own bushes the present season. They can be readily distinguished by shaking a bush, when they let themselves down by spinning thread. But these caterpillars are not numerous. They are not the "currant-worm" which has proved so destructive in this section since 1853. We think there can be but little doubt that this insect is the "gooseberry saw-fly" (*hematus trimaculatus.*) It is a worse enemy than the gooseberry and currant *moth* (*abrazas grossulariata.*) But the worms are not "caterpillars." It is well known that the larvæ or young of most kinds of the "saw-flies" closely resemble caterpillars; so much so that they are frequently denominated "false caterpillars." Such are the worms on our currant bushes. They are not genuine caterpillars, though it is convenient to speak of them as such. But as it is evident we have two kinds of worms which devour the leaves of the gooseberry and currant it would be well to bear the distinction in mind.

We are glad the *Country Gentleman* has called attention to this subject. It is always important to call things by their right names, and it is evident that in this instance we are talking about different insects. We do not suppose that the "moth" described by Dr. Fitch is the parent of *the* currant worms which are so numerous on our bushes. But it would be well to have the matter definitely settled. As we have before said there is a "moth" in some sections that produces caterpillars on our currant bushes. These caterpillars closely resemble the "false caterpillars" or the gooseberry saw-fly. But it is the latter which produces what is popularly known as the "currant worm." In other words, "the perfect insect" of the currant worm is a "fly" and not a "moth."

ROTTING OF THE CHERRY.

In some districts of the country, the wet weather has nearly or entirely destroyed the cherry crop the present season, and earnest inquiries for a remedy are the consequence. The only remedies known, appear to be prevention. In order to get rid of the moisture as speedily as possible after rains, the trees should be planted where the air circulates freely, on hills or exposed places, and as much as possible away from other trees. Cherry orchards should therefore never be crowded. Besides these precautions, select those soils which rot the least, or make it a point to have enough of them to furnish a supply in very wet seasons, when others are destroyed. Probably no variety is less affected than the Early Richmond (the genuine sort,) the rich acid flavor appearing to be proof against it. All high flavored acid varieties withstand rot better than the sweeter and more delicate sorts. The Morellos are valuable in this respect and the Dukes are commonly less affected than the Hearts and Bigarreaus. Of the latter, the old Black Carone is one of the best,—a sort thrown out of most collections years ago, but worthy of a place on this account, and a good high flavored fruit when perfectly ripe. Some of Dr. Kirtland's new sorts have a rich acid flavor, (such as the Tecumseh and Red Jacket,) and we have found these to withstand rot better than the more esteemed and delicate varieties. The common Black Tartarian is a very delicate and nearly sweet fruit, and hence particularly liable to this disease.—*Country Gentleman.*

The best strawberry in England is said to be Rivers' Eliza.

"JUNE THE TIME TO PRUNE FRUIT TREES."

EDS. GENESEE FARMER:—In looking over my numbers of the *Farmer* to-day, I noticed an article in the May number of 1864, with the above heading. This put me in mind of a remark made by one of my neighbors, a clever Dutch farmer, who was passing by when I was cutting off some shoots in my orchard. "What are you doing?" said he. I answered, "Cutting off some shoots and sprouts which grew on the trunk and near the ground." He remarked, "This is no time to prune or trim trees." Said I, "It is my time." "Well," said he, "you will see you will ruin your trees." Said I, "If this be so, it will be my loss." But I had my misgivings at the time, as I was not quite certain I was right; but as I only came in possession of my farm this spring, and having much to draw my attention, I did not trim my orchard when other people thought I should; and not wishing to tramp down the grass, which was growing for hay, I deferred the matter till after the grass was cut and the hay made, which was the last week in June. This by reading the very able article written by E. D. Wright, I find to be the right time; and this much I have gained by being the only subscriber to the *Genesee Farmer* in our place.

D. W. SAMPREL.

Northumberland, Pa., July, 1856.

LARGE PANSIES.

A WRITER in one of our horticultural periodicals, we do not remember which, gives his experience in growing large pansies, as follows:

"Last year we had a bed of very fine pansies, the seed of which was obtained of the most reliable florists. We gathered the first and earliest seed from this bed, and planted as soon as ripe. They came up and became strong and healthy plants before winter. We transplanted them into a nicely prepared bed just before winter set in, then covered them with litter from the cow-yard; and finally spread over the whole a quantity of evergreen boughs. As soon as winter was fairly over, we took off the evergreens and raked off the litter, and we found them as fresh and green as when first set out. I do not think one of them died. We never had a bed of pansies keep better through the winter. We have between two and three thousand plants, many of them in bloom. They far exceed our expectations, being much superior every way to those of the previous year. We have thought they would not be pretty if they were any larger. One of them measures more than two inches in diameter, many of them two inches, and nearly all one inch and three-fourths. Cultivation has done much for this flower."

We have done a little in this way ourselves, within the last couple of years, and have had most excellent success. We did not transplant ours, but allowed them to remain where the seed was sown, only covering them in the winter with manure. To obtain large pansies the foregoing mode must be followed.—*Germantown Telegraph.*

CULTIVATION OF STRAWBERRIES.

MR. DAY, of Morristown, N. J., a successful strawberry grower, furnishes the New York *Observer* with his method of cultivation: First—

Soil.—The soil is a clay loam, clay rather predominating, sufficiently stiff to *bake*, when not well manured and cultivated. Second—

Time of Planting.—My bed was planted in the spring, but I usually plant more in August and September than any other season. My custom is to plant at either season when I get ready. If planted in August or September a fair crop may be expected the following season. Third—

Distance Apart.—I invariably plant in *rows* and *never* in *beds*. I hold that the objections to planting in *beds* are so great and so palpable, that it will admit of no discussion whatever. My standard rule is to plant in rows three feet apart, and plants two feet in the row. I have found this close enough for every convenience of picking, cultivation, manuring, &c. Fourth—

Runners.—"What do you do with the runners?" is almost a universal inquiry. We treat them as *weeds*, unless wanted for the increase of stock. Cut them off as fast as they appear, by any convenient process your own judgment may dictate; a light, sharp steel spade, or a scuffling-hoe, I have found the most practicable and expeditious. Fifth—

Manures.—I use no other but barn-yard manure, *composted* nearly one year, with an occasional top-dressing of dry wood ashes. The soil is lined before the bed is planted at all. The object of composting is to destroy the seeds of grass and weeds, the bane of strawberry culture. The value of composted manures, in my estimation, is simply beyond computation. Let any one try it once.

In first preparing the ground I aim to use an *abundance* of manure. My theory is that plants that are expected to produce *fruit* must have something to *feed* upon. Sixth—

Mulching.—I mulch in the fall with clean straw, and leave it on through the spring for the fruit to lie upon while ripening, to avoid the necessity of washing the fruit, only opening the mulch immediately about the crown of the plant. Seventh—

Duration.—I prefer to have some new plantings coming in every season; but, by good management, I think a bed may be continued in one place about three years. Eighth—

Product.—The total product of our bed, this season, was a fraction short of *five bushels* on the 37.50 part of an acre, making at the rate of 185 bushels to the acre. Ninth—

Flavor.—The "Albany Seedling" combines more good qualities in itself than any other one variety we know of. It has been pronounced by some as

too acid. We have not found it so when properly ripened. Even that acid is pleasant and very healthy. Tenth—

General Management.—In conclusion, we would urge *clean* cultivation, principally by hoeing, and only plow or spade but once a year—viz., just *after* the crop of fruit is gathered.

THE CUT-WORM IN GARDENS, AND A WAY TO MANAGE IT.

This pest of all pests in the garden, (especially if one happens to have a garden that is full of its specimens,) is a regular scourage among young and tender plants. For several years I have had to take up my pansies and keep them in boxes of sifted soil, in order to save them from being all destroyed. And for four years in succession they have cut down about all of my Truffaut's peony-flowered Asters. They would also work at almost all young plants, and no help for it, but to go out mornings, and where there was a prostrate plant dig out the worms and kill them. I have spent more money for Truffaut's Asters than for any other one kind of seed. I have obtained package after package of imported seed, and then had them nearly every one cut down. Putting all together, I have labored weeks on account of this worm alone, beside suffering the disappointment caused by the loss of the plants. As if in close affinity with the great arch parasite and destroyer, this thing would work only among those plants most prized. Indeed, I hardly ever knew one to cut off a weed, and but very seldom a coarse plant. This spring they were quite numerous in our garden by the green house. It is in this spot that they delight, the soil being light and easy to work. The last winter was particularly favorable to them, the ground being covered with snow all winter. The snow came before there was much frost in the ground, and kept them warm in their winter quarters. I well remember the dismay with which I observed their numbers this spring. The following was my method of treatment: I commenced digging the soil early, and had all my plants taken up. I then put in each bed a good portion of soot cleaned from the stove pipes and furnaces, and raked it in well with the soil, allowing it to remain and soak in several good rains before I set out my plants. It is now June 26th, and I have not lost a plant where I put the soot, although the worm has worked as usual in certain portions of ground where no soot was placed. A little extra toil and pains will pay, if we can thereby escape the vexatious experience of having our plans frustrated for the whole season. All that are annoyed with the cut worm, can appreciate such deliverance from it, if they will make use of plenty of soot. It may be well to rake it in thoroughly, and let the rains neutralize it before setting out the plants. If it is not too strong it is an excellent fertilizer in light soils.—Mrs. E. G. Hawley, *Oneida Community, in the Circular.*

SULPHUR FOR KILLING WORMS ON TREES.

Eds. Genesee Farmer:—About the year 1834 the worms were probably more troublesome on our fruit trees than now. My own orchard was so striped of verdure as to look as if it had been burned over.

In the month of *February* following I bored into the trees with a half inch bit about two inches, and packed the hole full with *powdered sulphur*, pluging up the hole, using as short a plug as possible.

When the sap started, the sulphur being diffused throughout the branches and entering fully into the circulation did its work *effectually*. The worms hatched; but as soon as they commenced feeding they droped off dead. The whole orchard the following year was fresh, and more than usually luxuriant. I think the only reason this remedy has ever failed—is, because the sulphur was not applied at the *proper season* so as to be taken up by the circulation of the sap. M. B.

Rochester, N. Y.

Salting Down Cucumbers for Pickles.—Leave half-inch of stem on cucumbers—wash them in cold water—immediately pack with salt in alternate layers, salt next to wood—one barrel salt to five of cucumbers. Fill barrel full, putting salt on top—cut a wide board so as to just fit *inside* of barrel—bore half a dozen half-inch holes through—place it on pickles with a stone on, which should weigh at least twenty-five pounds, so as to keep the pickles always in brine. Take off all scum which rises. Keep the barrels in the shade, and in four weeks take off stone and fill to top, as they will settle some. Put more salt on, then head up, and they are ready for market. It is best to have two sizes of pickles.—W. W. C., *Fairport, N. Y., in Country Gentleman.*

The chief value of the Catawissa raspberry consists in its hardiness. Throughout the New England States as well as in this section all the better varieties of raspberries require protection in winter, but the Catawissa does not. Whether the other varieties are not enough better in quality to compensate for the little labor required to bend down the canes and throw a spadeful of soil on the ends is a question of taste. As a general rule those things that require the least labor are the least valuable.

Whenever you see a caterpillar's cocoon in your orchard, get it off the tree and trample upon it.

Ladies' Department.

OCCUPATION OF WOMEN IN ENGLAND.

"But it must be granted, that, if the employments to which American women are compelled to resort are often severe, and less remunerative than they ought to be, they are by no means so unsuited to the sex as some which women are forced into in other countries. Only a few years ago many thousands of females were working under-ground in the English coal-mines. When laws were enacted to abolish this unsuitable employment, they still continued to work at the mouth of the mine, and are thus employed at this moment. They labor in the coke-works and coal-pits; they receive the ores at the pit's mouth, and dress and sort them.

"So far exceeding masculine strength and endurance are the the tasks imposed on thousands of English dairy-women, that they constitute a special class of patients with the medical faculty,—pining and perishing under maladies arising entirely from over-fatigue and insufficient rest.

"There are multitudes of women in Liverpool who work daily on the farms around that city. They walk four or five miles to the scene of their toil, where they are required to be by six in the summer months and seven in the winter. They work all day at the severest agricultural labor, wielding a heavy, clumsy hoe, digging potatoes, grubbing up stones from the soil, stooping on the ground in weeding, and compelled even to the unfeminine and offensive employment of spreading manure. For a day's work at what men alone should be required to do, they receive but a shilling! Then, worn out with fatigue, having eaten little more than the crust they brought with them,—for what more can be afforded by one who earns only a shilling a day?—they drag themselves back at nightfall over the increasingly weary miles which they traversed in the morning. What comforts can fall to the lot of such? What a domestic life must such unhappy creatures lead!

"There are yet others, in that land which boasts of its high civilization, who live by carrying to the city immense loads of sand for sixpence a day,—harder work than carrying a hod. Other women may be daily seen collecting fresh manure along the streets and docks of Liverpool.

"In certain rooms of the great English cotton-mills, the high temperature maintained there often compels the women to work in a half-naked condition. This constant exposure of one half the body speedily destroys all feminine modesty. Added to this is an extreme, but unavoidable, filthiness of person. These poor creatures part with their health almost as quickly as with their modesty. They become hollow-cheeked and pale, while their coarse laugh and gestures indicate a deep demoralization."—*Needle and Garden in Atlantic Monthly.*

Buttermilk Pop.—Rub an ounce of butter into a tea-cup of flour, wet it up to a thin paste with cold buttermilk, and pour it into two quarts of boiling fresh buttermilk. Salt to the taste.

Ice Cream.—One quart of milk, one and a half tablespoonfuls of arrowroot, the grated peel of two lemons, and one quart of thick cream. Add the juice of the two lemons. Twice this quantity is enough for thirty-five persons. Find the quantity of sugar that suits you by measure, and then you can use this every time, without tasting. Some add whites of eggs, others think it just as good without. It must be made *very* sweat, as it loses much by freezing.

Philadelphia Ice Cream.—Two quarts of milk (cream when you have it), three tablespoonsfuls of arrowroot, the whites of eight eggs well beaten, one pound of powdered sugar. Boil the milk, thicken it with the arrowroot, add the sugar, and pour the whole upon the eggs. If you wish it flavored with vanilla, split half a bean, and boil it in the milk.

Strawberry Ice Cream.—Rub a pint of ripe strawberries through a seive, add a pint of cream, and four ounces of powdered sugar, and freeze it.

Soup.—Get a good beef soup bone, boil two hours, leaving about two quarts of broth; break two eggs into some flour, and knead it very stiff; roll out in three sheets to the thickness of wrapping paper; spread them on a table to dry for half an hour; then place them on one another and roll them up as you would jell cake; with a sharp knife, cut very fine strips from the end, not wider than the thickness of a case knife; shake them up to separate them; drop into your broth slowly, stirring your soup all the while. Boil ten minutes; season with pepper, salt, celery, or a little parsley.

French Pancakes.—Take six eggs, separate the yolks from the whites; beat the whites on a dinner plate to a snow; beat four yolks with two tablespoonfuls of sugar, two of flour, and a teacupful of cream; add a little salt, and a very little carbonate of soda; put in the whites of the eggs, and mix gently. Put one ounce of butter in a frying pan; when hot, pour in the whole pancake. Hold the pan a good distance from the fire for fifteen minutes; hold before the fire to brown on the top. Dish on a napkin. Put any kind of preserved fruit over it. Serve hot.

Apple Snow.—Put twelve very tart apples in cold water over a slow fire. When soft, take away the skins and cores, and mix a pint of sifted white sugar; beat the whites of twelve eggs to a stiff froth, and then add them to the apples and sugar. Put it in a dessert dish, and ornament with myrtle and box.

Flummery.—Cut sponge cake into thin slices, and line a deep dish. Make it moist with white wine; make a rich custard, using only the yolks of the eggs. When cool, turn it into the dish, and cut the whites to a stiff froth, and put on the top.

Substitute for Butter.—The Baltimore *Clipper* says:—A lady who is a famous housekeeper, recommends an economical plan for making cake without butter, which may be useful to our lady readers. Take a piece of fat salt pork, melt it down and strain it through a piece of coarse, thin muslin. Set it aside until cold. It is then white and firm, and may be used like butter in any kind of cake. In pound cake, she assures us it is delicious. She says after one trial she never used butter.

A COUPLE of discontented cows came down the hill pasture to a little patch of corn, and looked over. It was grandmother Muggins' corn, and it was fenced round. The cows had all the pasture on the hill, east, west, north and south, besides a little brook; but it did not satisfy them, for you know that some it is impossible to satisfy; the more they have, the more they want; which was the case with these cows, else why should they look into grandmother Muggins' little patch? They pushed their noses between the rails, and snuffed the growing corn. What if they should use their crumpled horns, hook off a rail, and walk in? This is what grandmother Muggins' thought; therefore, "Little Jerry," said she, "I am going to carry a basket of clean clothes to the hospital; you and 'Wagtail' watch the cows, and do n't let them break into the corn."

"Wagtail," hearing his name called, began to wag his tail. "*I* will keep the cows out," answered little Jerry with a consequential air; "it takes *me* to look after the corn;" and Jerry strutted away with "Wagtail" at his heels. "Wagtail," said he, "you might as well go with the clean clothes; *I* can look after the cows and the corn."

"Can you?" wagged "Wagtail' humbly.

Little Jerry was tired with his long tramp from the red school-house. "Wagtail" had been in the forest hunting a woodchuck, and he was tired. So they both sat down on the flat rock. The south wind sung a lullaby. The cows from beyond the fence eyed the little boy, and the little boy eyed the cows. Jerry shook his fist, and the cows shook their heads. At length Jerry nodded, and he nodded and he nodded till he fell asleep; and the cows taking the advantage, began to pry the rails with their crumpled horns. "Wagtail" had his ears pricked. He sat up as alert as a soldier. He sleep! not he; and no sooner did the cows show their designs upon the corn, than he ran down and barked, and he barked and he barked till grandmother Muggins came home and found—little Jerry fast asleep.

"*Trust him who makes no boasts*," said grandmother Muggins, patting the faithful "Wagtail" on the head.

Miscellaneous.

"SELLING" A FELLOW.

Last summer, while engaged in the tobacco and segar business, I used to have for a customer in cheap segars one of those knowing fellows whose knowledge serves better to bore his victims than advancing science. You couldn't make him believe that—oh no! Tell him there were regalia segars that cost $40 per thousand!—it might do to stuff down the throats of those who knew no better; he was none of them. And so it was with everything; he always knew best. It always appeared to be his delight to draw me into some controversy, no matter what the subject, in order to hear himself hold forth. I tried every way I could think of to circumvent him, but at last I did succeed in laying him out as flat as a flounder.

It was on a Saturday afternoon, he came in, made his purchase, and seated himself to deal me out his usual portion! but I was awake for him.

"Captain," said I, "I have made up my mind to go to California, and, if you wish to go into a speculation, now is your time."

"As how?" said he.

"Why, you see them fifteen boxes of segars? well, there are two hundred and fifty in each box, and I will let you have the whole fifteen at a low rate, providing you take them all."

"Very well," said my friend, "let's hear the conditions."

"You give me one cent for the first box, two for the second, four cents for the third, and so on double up on every box."

"Done!" said he; "fetch on your segars. S'pose you think I haven't money enough—eh?"

"Not at all, so let's proceed; here's the first box."

He drew from his pocket a leathern purse, and out of it a handful of coin.

"And here's the cent," said he, depositing a green discoloured copper on the counter.

"Here's your second box."

"And here's your two cents."

"Very well, here's your third box."

"And here's your four cents," said he, chuckling.

"Here's your fourth box."

"Exactly, and here's your eight cents! Ha! ha! ha! old fellow—go on!"

"Here's your fifth box," said I, handing down another.

"And here's your sixteen cents."

"Here's your sixth box,"

"And—ha! ha! ha!—here's your thirty-two cents."

"Here's your seventh box."

And here—ha! by Jove the joke is getting too rich—here's your sixty-four cents, and nearly half of your segars are gone."

"Here's your eighth box," said I, assuming a cool indifference that perfectly astonished the fellow."

"And here's your dollar and twenty-eight cents."

"Here's your ninth box."

"And here's your—let me see—ah! two dollars and fifty-six cents."

"Here's your tenth box."

Here he drew his wallet thoughtfully, and on the slate made a small calculation.

"And here's your five dollars and twelve cents."

"Here's your eleventh box."

"And here's your—twice five is ten, twice twelve is twenty-four—ten dollars and twenty-four cents."

At this stage of the game he had got quite docile, and I continued—

"Here's your twelfth box, hand over twenty dollars and forty-eight cents."

Here the globules of perspiration, large as marrowfat peas, stood out in bold relief on his face, but at length he doled out the sum.

"Here's your thirteenth box—fork over your forty dollars and ninety-six cents."

At this crisis he looked perfectly wild. The sweat was pouring off him in streams, and the tobacco juice was running out of his mouth.

"F-o-r-t-y-n-i-n-e-t-y-s-i-x. If I do I do, but if I do I will be hanged, I will."

Quiddities.—Domestic magazines—wives who are always *blowing-up* their husbands.

The smaller the calibre of the mind, the greater the *bore* of a perpetually open mouth.

Punch says the gender of a railway train is feminine. Don't you often miss it?

The first thing a man takes to in life is his milk—the last is his *bier*.

A man was gored to death, in Liverpool, recently by an—Irish bull.

The height of Inhospitality.—Not to entertain your own opinion.

Wanted for chemical purposes.—A lady "dissolved in tears."

An Eastern Anecdote.—One of Nasseredin's neighbors called upon him, and solicited the loan of a rope. The Koodjah went into his house, and after a delay of several minutes, returned and told the borrower that the rope was in use to bind up flour.

"What do you mean?" said the neighbor, "how can a rope be used to bind up flour?"

"A rope may be applied to any use," replied the Koodjah, "when I do not wish to lend it."

Napoleon, once in the gallery of the Louvre, turned from a fine picture to Baron Denon, saying: "That is a fine picture, Denon." "Yes, immortal," was the reply. "How long will this picture and a statue last." said Napoleon. "The picture five hundred years, and a statue five thousand, sire." "And this you call *immortality!*" said Napoleon, shortly.

An Irish peasant being asked why he permitted his pig to take up his quarters with his family, made an answer abounding with satirical *naivete*. "Why not? Doesn't the place afford every convanience that a pig can require?"

The Markets.

In general agricultural produce, there are few transactions. The market has not yet opened. The views of farmers and buyers are far apart. The latter only purchase when they can "make a sure thing of it." Our advice is, not to be in too big a hurry to sell. We cannot believe that there was as large a breadth of grain sown as in ordinary years. There were not men enough to do it. Then the crops, taking the country through, are not above an average yield, while all accounts from the South represent a fearful destitution, and it seems clear that a large amount of produce must be sent South. There is no money in the Southern States, and this will check the demand for Northern goods, but *food* must be had. Before the war the South raised more food in proportion to population than the North. Then the Eastern States are almost entirely depended on the West for breadstuffs; while the Middle States do not, even before the war, raise enough to supply their own consumption. The West then has to furnish food for New England and to make up the deficiency in the Middle States. This was the case before the war. Now in addition to this there will be a demand from the South, and this must be met from the West—and if, as we assume, there was a less breadth sown than usual, it seems clear that there will be no such "surplus" as many of our produce dealers would lead us to suppose.

Wait till the market fairly opens. There is no reason to apprehend lower prices *unless there should be a decline in gold*—and we think that this is *already calculated for* by the dealers. Were they sure that gold would continue at 140, prices would immediately advance. In fact prices of breadstuffs in the Eastern markets have advanced within the past few days, though it is said to be merely speculative, and has stopped exportation to England. American red wheat in England now brings about $1.20 in gold. This with gold at 140 is equal to $1.68. What the price will be in England the coming season is yet uncertain. It is now, and has been for the past three years much below an average. There as here they are waiting to see what demand there will be in the Southern States for produce.

We understand that some of the millers are talking of "a dollar a bushel for Mediterranean wheat." This is simply absurd. *Wheat cannot be raised at this price*, and it is safe to assume that whenever grain gets below its actual cost of production, an advance will soon take place. We think farmers in this section should obtain $1.50 to $1.60 for good Mediterranean and Amber wheat We should not care to sell for less. It may be lower, but the chances are that it will be higher.

Wool has pretty much passed out of the hands of the farmers. A large dealer tells us that he never bought wool so easily. Farmers were determined to sell for what they could get. We hear of one large farmer who was offered $1 a pound last year and three cents extra for drawing it to Brockport, but refused it, who has sold both clips the present season for fifty-two cents. We think farmers were unnecessarily in haste to sell this season. Prices have lately advanced fully five cents a pound. Everything that the farmer has to buy is still high, and there is no reason why good prices should not be obtained for what he has to sell. As a general rule, it is better to sell when you are ready, provided a fair price is offered, but not to be in too big a hurry when the dealers are determined to make up for previous losses, as is the case at present.

New Advertisements.

Among the new advertisements in the *Farmer* this month will be found several announcements of interest to our readers.

Seymour's Patent Tree Protector, strikes us favorably. The manufacturers sent us one for trial, but we have not yet had time to use it.

Whitcomb's Spring-Tooth Rake is a most excellent machine for raking hay, wheat stubble, &c.

Hutchinson's Wine and Cider Mill is just the thing for farmers' own use, They are extensively used in this section, and give good satisfaction.

Whittmore's Cure for Foot Rot in Sheep is well spoken of by those who have tried it. Send to the manufacturer, F. W. Whittmore, Chatham Four Corners, N. Y., for one of his circulars containing directions.

The Philadelphia Raspberry, Wilson's Early Blackberry, &c., are offered for sale by the Hon. W. Parry, of Cinnaminson, N. J. His name is a sufficient guarantee to all who know him.

"Magic Picture Cards" will interest the young people. They are very ingenious.

A. M. Purdy, of South Bend, Indiana, who is an extensive strawberry grower, can furnish good plants at cheap rates.

The Champion Force Pump advertised by John Rapalje, of this city, is a most useful and efficient machine. We have used the Hydropult for many years, and would not willingly part with it. Had it not been for this small hand machine our house, a short time since, would have burnt up. This Champion Force Pump we regard as superior to the hydropult, it is far simpler and equally powerful, while a lady can use it. For syringing bushes, trees, &c., as well as for washing windows, carriages, &c., it is exceedingly useful, while in case of fire it will frequently save a hundred times its cost. We cannot too highly recommend it to our readers.

The Ohio *Farmer* of July 29, says the farmers are beginning to sell their wool in that State. Large quantities changed hands last week at about sixty cents. One lot sold for sixty-five cents, but as a general rule buyers refused to pay more than sixty cents, and a shade under.

The Scientific School of Yale College.

JOSEPH HARRIS, ESQ.—*Dear Sir:*—In compliance with your request I communicate some details of our plan of Agricultural Instruction, which it is proposed to begin in the Sheffield Scientific School of Yale College the coming autumn. Our Institution is, I believe, the first to go into operation under the provisions of the Congressional grant of land to the States for establishing schools of industrial science. The agricultural department being one branch of a school intended for general scientific and industrial education, its facilities in respect to completeness and thoroughness of instruction in the studies necessary to and underlying a proper agricultural training, are not surpassed by any existing school or college. The student of agriculture will enjoy the instructions of fourteen Professors of acknowledged ability, besides those of several assistant teachers in the following subjects, viz: English, French and German languages, including Rhetoric and Elocution, Natural Philosophy, Chemistry, Botany, Zoology, Minerology, Geology, Meteorology, Anatomy and Physiology, Physical and Political Geography, Land Surveying, Higher Geometry, Geometrical and Free-hand Drawing.

The full course of study occupies three years. During the first year the pupil pursues preparatory studies. With the second year, he takes up in conection with general science, topics bearing directly on Agriculture, viz: Vegetable Physiology and Agricultural Chemistry, presented in a course of Lectures extending through twenty-eight weeks. In these lectures, during the first term, the whole subject of the composition, structure, growth and nutrition of the plant—its dependence on the air and soil—the composition and character of the soil, the means of its culture and renovation by tillage, drainage and manures—the kinds, uses and management of manures, will be discussed in the light of the most advanced knowledge as derived from both Science and Practice. In the second or third term the same general topic will be continued, but with special reference to the domestic animal and its products. The laws of animal nutrition, the value and uses of different kinds of fodder, the preparation of food by steaming, &c., the proper mixture of fodder for special purposes of fattening, &c., and the chemical technology of the dairy, will be explained as far as the present state of our knowledge admits.

In order to familiarize the student with the properties and uses of those bodies which compose, nourish or result from agricultural plants and animals, a course of experimental Practice in the chemical Laboratory, will be followed during the second year, which will serve, besides the important purpose of developing and disciplining the learner's powers of inquiry and observation. During the third or summer term of the second year, will be taught the Principles and most approved methods of horticulture and kitchen gardening.

In the third year will be given a course of Lectures by Prof. Brewer on Agricultural Practice. He will give during the first term an account of each principal crop of the Northern and Middle States, its origin, varieties, modes of culture, uses and adaptation to various conditions of soil, climate and market. In the second term, the rearing, care and uses of domestic animals, the characteristics of breeds and races, the economy of pasturing, soiling and stall-feeding, will be considered in detail.

During the last term of the course, Prof. Brewer will review the condition of Agriculture, past and present, in foreign countries, explain the systems of farming practised in England and other lands where great excellence has been attained in husbandry, and unfold the philosophy of Rural Economy in general.

During the third year, Prof. Verrill, having previously taught general Zoology, will give a special course of lectures on the natural history of domestic animals and on insects useful and injurious to agriculture.

Prof. Eaton will also lecture on Forestry—the culture, preservation and uses of forest trees, and on Weeds and noxious Plants.

In the special agricultural instruction, it will be kept in view to present such matter as will interest and prove useful to the American farmer, rather than to make a display of minute and unpractical knowledge. To profit to the fullest extent the student should possess a considerable practical knowledge of moral affairs, such as comes from several years residence on a farm.

For illustrations of the topics discussed, no pains will be spared to provide experiments, diagrams and museum specimens, and by frequent excursions to neighboring farms and gardens, its instruments, processes and results of culture, good and otherwise, will be demonstrated in the most effective manner.

To enable the student to pursue his inquiries in foreign fields, the French and German languages, both so rich in their agricultural literature, are taught to an extent quite unusual, the tuition in them covering nearly the whole course of three years.

To answer the wants of young men who cannot spare time for a protracted course of study a *shorter course* of seven months is arranged for the autumn and winter terms of each year. (From middle of September to middle of April.) Those who desire can thus attend to all the more important special agricultural topics of the full course in a short space without pursuing languages or other accessory studies.

Admission to the shorter course requires no examination.

Mr. Sheffield, the munificent patron of the school, is now making extensive additions to the building to adapt it to the better accommodation of this and the other departments. A commodious Library and Reading Room will thus be provided, in which the student can have access to the standard agricultural books and journals, under appropriate regulations.

Yours truly,
S. W. JOHNSON.

We cannot but add to the above interesting letter from Prof. Johnson, that we know of no institution where a farmer's son can get such a thorough knowledge of the principles of scientific agriculture as at the Sheffield Scientific School of Yale College. Even the "shorter course," alluded to by Prof. J., would be of incalculable advantage to any young farmer. We would most earnestly advise any of our young readers who have the opportunity, to attend this course of instruction the coming autumn and winter. Prof. Johnson, himself a farmer's son, is unquestionably one of the ablest agricultural chemists in this or any other country, and it is no ordinary privilege to sit under the instructions of one so thoroughly acquainted with the principles of scientific agriculture, and who has at the same time a sufficient acquaintance with practical farming to know how to treat and apply them.—EDS. GENESEE FARMER.

Seeding Land to Grass.

WHERE grass seed is sown alone, August is the best time to sow it, or, if not convenient before, it will do in September. We have known excellent crops obtained the next season from land sown the previous September. On low land that can only be plowed at this season, there is a manifest advantage in seeding at this time. In such situations, red-top (*Agrostis vulgaris*) is, of course, the best kind to sow.

IT is said that the farmers in Oxford, Maine, have contracted to furnish potatoes this fall for the manufacture of starch at twenty cents per bushel. We do not anticipate such low prices in this section, though an unusual breadth of land was planted, and the potatoes are very luxuriant. It is said that the disease has already made its appearance, and many of the young shoots are dead.

Agricultural Exhibitions for 1865.

State Fairs.

Ohio	Columbus	Sept. 12-15
New York	Utica	Sept. 12-15
Canada West	London	Sept. 18-23
Illinois	Chicago	Sept. 4-9
N. Eng. Ag'l Society	Concord, N. H.	
Pennsylvania	Williamsport	Sept. 26-29
Canada Lower	Montreal	Sept. 26-29
Michigan	Adrian	Sept. 19-22
Iowa	Burlington	Sept. 26-29
Indiana	Fort Wayne	Oct. 2-7
California	Sacramento	Sept. 11-15

County Fairs.

NEW YORK.

Chenango	Norwich	Sept. 18-20
Cattaraugus	Little Valley	Sept. 26-28
Cayuga		Oct. 3-5
Dutchess	Washington Hollow	Sept. 26-28
Genesee	Batavia	Sept. 20-21
Monroe	Rochester	Sept. 26-28
Otsego	Cooperstown	Oct. 3-5
Queens	Flushing	Oct. 4-5
Suffolk		Sept. 27-28
Ulster	Kingston	Sept. 20-22

OHIO.

Ashtabula	Jefferson	Oct. 3-5
Clarke	Springfield	Sept. 5-8
Delaware	Delaware	Sept. 26-28
Franklin	Columbus	Sept. 6-8
Geauga	Burton	Sept. 19-21
Hancock	Lindlay	Oct. 5-7
Lake	Painsville	Sept. 27-29
Madison	London	Sept. 7-9
Morgan	McConnellsville	Oct. 3-5
Morrow	Mt. Gilead	Oct. 3-6
Portage	Ravenna	Sept. 20-22
Stark	Canton	Oct. 3-6
Summit	Akron	Oct. 4-6
Trumbull	Warren	Sept. 20-22

MAINE.

Essex	Lawrence	Sept. 26
Middlesex	Concord	Sept. 21
do North	Lowell	Sept. 28
do South	Framingham	Sept. 19
Worcester	Worcester	Sept. 21
do West	Barre	Sept. 28
do North	Fitchburg	Sept. 26
do South	Sturbridge	Oct. 5
do Southeast	Milford	Sept. 26
Hampshire, Franklin and Hampden	Northampton	Oct. 5
Hamshire	Amherst	Sept. 26
Highland	Middlefield	Sept. 14
Hampden	Springfield	Oct. 3
do East	Palmer	Oct. 10
Franklin	Greenfield	Sept. 28
Berkshire	Pittsfield	Oct. 3
Hoosac Valley	North Adams	Sept. 19
Housatonic	Great Barrington	Sept. 27
Norfolk	Dedham	Sept. 28
Bristol	Taunton	Oct. 3
Bristol County Central	Myrick's Station	Sept. 20-22
Plymouth	Bridgewater	Sept. 5
Barnstable	Barnstable	Sept. 3
Mantucket	Nantucket	Sept. 26
Martha's Vineyard	West Tisbury	Oct. 1

MICHIGAN.

Cass	Cassapolis	Sept. 27-29
Genesee	Flint	Sept. 27-29
Hillsdale	Hillsdale	Oct. 4-6
Ingraham	Mason	Sept. 27-28
Washtenaw	Ann Arbor	Oct. 4-6

ILLINOIS.

Kane	Geneva	Sept. 27-30
Macoupin	Carlinville	Sept. 3-6
Macon	Decatur	Aug. 29-31
Madison	Edwardsville	Aug. 29, Sept. 1
Putnam	Hennepin	Sept. 19-21
Winnebago	Rockford	Sept. 19-22

It is not yet too late to sow turnips. Scatter a little seed on every vacant spot in the garden and on the farm. When the corn is thin a good crop is frequently obtained with little or no labor. We know a farmer who says that one year he sowed turnips among his corn, and the turnips were worth more than the corn. They do not injure the corn crop. The *strap leaf* is the best variety we have tried for late sowing.

Literary Notices.

THE NORTH BRITISH REVIEW. June. 1865. Re-print. New York: Leonard Scott & Co.

We always welcome these Quarterlies, but never have found a pleasanter number than this. Every family in the country should have the Reprints of Leonard Scott & Co. They are a library in themselves. And now that we are at peace again, the tone of their articles in this country will be so changed that there will be no drawback to the pleasure which their other articles have always given.

Now is just the time to subscribe for the entire set, or any part of it. Each number of the Quarterlies is a valuable work in itself.

SONGS FOR ALL SEASONS. By Alfred Tennyson. Ticknor & Fields: Boston.

This is the second of the series of "Companion Poets for the People, and is beautifully printed and tastefully illustrated. It contains most of the many exquisite little poems and songs which are scattered through Tennyson's entire works.

THE MAN WITHOUT A COUNTRY. Boston: Ticknor & Fields.

This is a curious and entertaining account of "Philip Nolan," which was published some time since in the *Atlantic Monthly*. It attracted so much attention in that form, that the publishers have reprinted it in a little pamphlet. It is an account of the punishment which in a former time our Government awarded to a traitor.

Diehl Select White Wheat.

We know nothing of this variety of wheat, advertised in the *Farmer* this month farther than what is stated in a letter from the Messrs. Sheldon, of Cleveland, Ohio. They seem to be fair and honorable men, and we have confidence in their statement. It seems that this wheat originated in Indiana. Mr. J. Diehl noticed a single stool of bald wheat growing in a field of Mediterranean, which on examination proved to be a beautiful white wheat,—which ripens as early as the Mediterranean. He sowed it and continued to do so till he could furnish seed to his neighbors, and they state that it is "by far the best and most profitable variety to raise." The straw is stiffer than the Mediterranean, and the yield fully one-third greater.

We have always said that a good variety of white wheat that would ripen as early as the Mediterranean would be worth millions of dollars to the country, and we hope our readers will try this Diehl wheat and report the result.

The Crops.

In this section wheat will be a fair average. Barley and oats are unusually good. Corn on low land, owing to the wet, cold weather, looks yellow, and will be a poor crop. On rich, dry land it looks promising. The weather has been unfavorable for beans, and there has been less land planted with this crop than for many years past. There is not one acre planted this year where ten were planted last year. The grass crop is unusually good. Apples are almost a failure in this section. The army worm has proved very destructive in many orchards. Peaches are also a failure.

A Heavy Roller.—The granite roller that is used for the preparation of the Hillsborough, N. H., Fair ground, weighs six tons and seven hundred and fifty pounds.

Inquiries and Answers.

I WISH to ask through your excellent paper what are the best roots to feed milch cows. (*a*) Also what breed of cows will give the largest quantity of milk. (*b*) I also wish some one experienced in raising tobacco would give an article on its culture through your paper. The routine of labor from planting till it is ready for market. (*c*)

There is running through my farm a river that becomes very rapid in spring and fall, its course being crooked it washes the banks very bad, often moving its bed three and four rods. The banks of the river are of a rich mucky soil, similar to the Mohawk flats. I wish you and some of the many readers of the *Farmer* would give a remedy to prevent the rise washing the banks. Is there any kind of willow that will prevent it? (*d*) Also what will kill lice on calves. (*e*).—YOUNG FARMER, *Leyden, N. Y.*

(*a*) Carrots are probably the best roots for milch cows, but mangold wurzel are nearly as good and can be raised with less trouble and afford a heavier crop.

(*b*) In proportion to the food consumed the Ayrshire cow gives the greatest quantity of milk.

(*c*) You will find several articles on the culture of tobacco in the volumes of the *Genesee Farmer* for the last six years. If you have not these volumes we can send you them for $5.00. No "Young Farmer" should be without them. You will also find an article on the culture of tobacco at the North in the Rural Annual for 1863.

(*d*) We have had no experience on this subject, and should be pleased to hear from those who have.

(*e*) Here again the back volumes of the *Genesee Farmer* would prove useful. They give a score or more of remedies. The one which the calves would like best is to feed them with flax seed. One of our correspondents says he gave his calves half a pint of it and it drove off the lice in two days. We presume he boiled it and made it into linseed tea. A tea-spoonful of sulphur given in some milk is another remedy. Rubbing oil on the back and on the head round the eyes is said to be effectual. Washing the calves in tobacco water or applying snuff will kill the lice, but if too much is used it may affect the health of the calves Mercurial ointment or angeuntum is still more powerful, but must be used with caution. Perhaps your best way would be to send to Messrs. Laler Bros., Utica, N. Y., for a package of their powders, with directions for using it. Let your calves be kept in a dry, warm (but well ventilated) place, cleaned out every few days and supplied with fresh litter, and they will rarely be troubled with lice.

LEACHED ASHES.—If you have had any experience in applying leached ashes to summer fallow please inform your readers through your very valuable paper how it should be applied, at what time, and in what quantity—whether it had best be applied as a top-dressing, or be plowed in and mixed with the earth. My land is clay. —AARON OVERHOLT, *Selkirk, C. W.*

We think it would make very little difference how the ashes were applied. The general practice, so far as we have observed, is to sow the ashes after the land has been plowed for the last time, and cultivate and harrow them in. On a summer fallow which is plowed more than once they might be plowed in at the last plowing, or in any way which is most convenient. If you have plenty of ashes we would use from 50 to 100 bushels per acre. The older they are and the more they have been exposed to the atmosphere the stronger they will probably be. In this section many of our wheat growers do not plow the "summer fallow" but once, say in June; and afterwards use the cultivators, harrows, &c., to pulverize and clean the land. We have seen 100 bushels of leached ashes cultivated in in July or August, with excellent effect. We should be pleased to hear from others on this subject.

SHEEP DISEASES.—I wish to ask a few questions of you or your numerous readers concerning distempers and ails in sheep.

1st. Catarrh: whether it will spread if one or two that have it were put among the flock, or whether it is hereditary, and if there is any preventive or cure for it?

2d. The foot-rot, or foot-ail: how it makes its appearance, and if it will spread in a flock, or is hereditary, and if there is any preventive or cure for it?

3d. The grub in the head: how a sheep acts that has it, and if there is any preventive or cure?

If any person knows of any other diseases peculiar to sheep I would be glad to hear from them with some remarks on the subject. A FARMER OF DELAWARE.

Price of Land in Illinois.

THE editor of the *Prairie Farmer* in a notice of the farm of Mr. W. Marks, of Danby, Illinois, says that farming land in that vicinity has nearly *doubled* in price during the last four years. Good farms now bring from $45 to $50 per acre, and they are "rapidly increasing in value." Mr. Marks was recently a New York farmer. He has moved west, and gone extensively into sheep husbandry.

Special Notices.

Away with Spectacles.—Old eyes made new, without Spectacles, Doctor or Medicine. Pamphlet mailed free on receipt of ten cents. Address E. B. FOOTE, M. D., No. 1130 Broadway, New York. sult

ADVERTISEMENTS.

A FEW short advertisements of interest to farmers—and only such—will be inserted in the GENESEE FARMER at twenty-five cents a line, or $2.50 per square, or $25 per column, each insertion, payable in advance.

THE GENESEE FARMER:

A MONTHLY JOURNAL OF AGRICULTURE AND HORTICULTURE.

Published at Rochester, N. Y., by

JOSEPH HARRIS.

Terms—INVARIABLY IN ADVANCE—One Dollar a year. In clubs of five and upwards, Eighty Cents each.

HALLETT'S WHEAT & DWARF PEARS. See Gardeners' Monthly for July. Price 20 cents. 23 North Sixth street, Philadelphia, Pa. sult

"MAGIC PICTURE CARDS."

EACH Picture disclosing upon close examination much more than is at first seen! NEW, UNIQUE, CURIOUS, PUZZLING and AMUSING. The whole set, with EXPLANATORY KEY, sent, postpaid, for 30 cents, or four sets to one address for $1. AMSDEN & Co., Publishers, 14 Bromfield street, Boston. 1t

IMPORTANT TO WHEAT GROWERS!

The Diehl Select Wheat,

AN entirely new variety, and now for the first time offered to the public, is a CHOICE WHITE WHEAT, as early and as hardy as any Red Wheat, and yields at least one-third more to the acre.

For sale by A. M. HALSTEAD, New York, F. BISSELL, Toledo, Ohio, and by the subscribers in this city.

For sample of Wheat and further information, send 6 cents in stamps to T. J. & J. T. SHELDON, Cleveland, Ohio. suit

Seymour's Patent Tree Protector.

Fig. 1.

Fig. 1 represents the Protector with all the parts together, and showing the mode of fastening them. The small hole is designed for pouring in oil, and should be kept closed.

Fig. 2.

Fig. 2 represents a section of the same. The cover *a*, and the trough, *b*, are each a half circle. The ends of the trough, *c*, *c*, are closed on each section to prevent leakage.

If these Protectors are applied in season, they will catch the female moths (which do not fly,) of the tent caterpillar or nest worm, the canker or measure, and Palmer worms, and all other insects that crawl up the bark, and which are so injurious and destructive to our orchards and shade trees. It is believed that the curculio or plum weevil may be caught in this manner. The catterpillar moths go up the tree to deposit their eggs about the last of June or first of July, and the moth of the canker or measure, and Palmer worms go up about the first of October, and in the spring as soon as the frost leaves the ground. At all such times the Protectors should be applied. If properly attended to, we have no hesitation in saying that they will prove a sure protection against these terrible pests.

The cover is made to project over the trough towards the tree, resting on and the whole supported by four nails driven into the trunk at equal distances apart. It is designed to leave a space of about one-half inch between the cover and tree to allow for growth of tree. This is filled with a packing of twisted straw or old rope to prevent the insects passing through. The trough when filled with oil will catch and destroy all insects as they pass up the tree.

The Protectors are made of cast iron, nicely japanned, and of all sizes to fit any sized tree. We own the exclusive right to manufacture and sell them throughout the United States, and are prepared to furnish them in quantities to suit purchasers, from our manufactory in New Britain, Conn., and from our warehouse No. 58 Beekman street, New York.

WANTED.—One Hundred Agents to canvass and sell the above Tree Protector, to whom liberal inducements will be offered. None need apply without proper testimonials as to character, &c. ☞ For further particulars send for circular.

au1t P. & F. CORBIN, New Britain, Conn.

SUPERPHOSPHATE OF LIME,

BONE DUST AND MEAT AND BONE COMPOST.

MANUFACTURED BY

TASKER & CLARK,

Cor. 8th and Washington Sts., Philadelphia.

THE manufacturers offer their Superphosphate to the public confident that it will be found equal to any similar article now in the market. Being made from finely ground bones (not burned), Peruvian guano, and other ingredients having manurial properties, it has been found a superior fertilizer for wheat, grass, &c., &c. Price $65.00 per tun at the factory.

MEAT AND BONE COMPOST.—A valuable manure from refuse meat, bones and other offal from the slaughter-house. Price $40 per tun.

BONE DUST—Very fine and pure at $65.00 per tun.

☞ Terms Cash. Address as above,

feb7t TASKER & CLARK, Philadelphia, Pa.

TILE MACHINE.

THE BEST MACHINE IN AMERICA. Send for a Circular containing description. A. L.a. TOURETTE,

ap65tf Waterloo, N. Y.

HUTCHINSON'S

CELEBRATED

FAMILY

WINE AND CIDER MILL.

LARGE and small sizes, greatly improved, for hand, horse or other power. OVER EIGHT THOUSAND HAVE BEEN SOLD IN TWO YEARS, giving unparalleled satisfaction. Send for Descriptive circular giving full particulars. Address

au1t HUTCHINSON & BROTHER, Auburn, N. Y.

WHITCOMB'S

Metallic Spring-Tooth Horse Hay Rake.

THE above Rake is designed for hay raking and gleaning grain fields. As a gleaner after the cradle in the wheat field it will pay its cost in a single day. Thousands of Rakes of the above patent are manufactured annually. For economy, durability, simplicity and efficiency it is unequalled.

For Circulars, Rakes and for Territorial Rights in the interior and Western New York, and also Pennsylvania, apply to

au1t JOHN PARDEE, Lysander, N. Y.

NEW ILLUSTRATED CATALOGUE.

ROCHESTER CENTRAL NURSERIES.

SEND FOR A CATALOGUE

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SPECIAL TERMS OF SALE,

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ORDER YOUR TREES DIRECT.

Address C. W. SEELYE,

apt7 Rochester Central Nurseries, Rochester, N. Y.

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COURSES OF AGRICULTURAL INSTRUCTION—Including the Practice of Agriculture and Horticulture, Agricultural Chemistry and Physiology, Principles of Breeding and Feeding, Injurious Insects, Rural Economy, Forestry, French and German Languages, &c.,—

Open September 13th, 1865.

For detailed Programme, apply to

ju4t PROF. GEO. J. BRUSH, New Haven, Conn.

Old Eyes Made New

WITHOUT SPECTACLES, DOCTOR OR MEDICINE.

Pamphlet mailed free on receipt of ten cents. Address E. B FOOTE, M. D., No. 1130 Broadway, New York. ju 4t

GROVER & BAKER'S

HIGHEST PREMIUM

ELASTIC STITCH

AND

LOCK STITCH

SEWING MACHINES,

495 Broadway, New York,

AND

48 STATE STREET,

Rochester, N. Y.

SheepWashTobacco

I hereby certify, that I have been familiar with all the processes employed by the South Down Company in the manufacture of their "Sheep Wash Tobacco," and that the article prepared under Mr. Jaques' Patent contains all the useful principles of the Tobacco in a concentrated form.

This Paste, employed as a Sheep Wash, according to the directions furnished by the Company, has the effect of curing Scab and other cutaneous diseases, and destroying all parasitic insects which infest the skin and wool of the Sheep, and thereby improves the health of the animal, as well as the quality of its fleece. Employed in the same way, the solution being made stronger, it will destroy those insects which infest the skins of larger animals, and also those that are injurious to vegetation.

CHARLES T. JACKSON, M. D.,
Assayer to the State of Massachusetts, and Consulting Chemist.

☞ Wool Growers should beware of any preparation that contains "sulphur," as it is sure to destroy the fibre of the wool. One pound of *Extract Tobacco* will make twelve gallons Wash, and contains the strength of eight pounds of Tobacco, as prepared by farmers.

Agents wanted in every Wool District.
JAMES F. LEVIN, *Agent South Down Co.*,
23 Central Wharf, Boston.

*** Farmers, preserve this advertisement, and ask your storekeepers to keep the Wash for sale. A liberal discount to the retailers. feb9t

SAWING MACHINES.

WE are building a GREATLY IMPROVED CROSS-CUT SAWING MACHINE for cutting logs into stove wood, with two or four horse powers to drive them.

Also, a new style CIRCULAR SAW for cutting cord wood into stove wood.

☞ Circulars describing our machinery sent promptly on application by letter. Write to JONAS W. YEO,
my4t Proprietor Robinson Machine Works, Richmond, Ind.

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UNION MOWING MACHINE.

4 Feet Machine from $170 to $145.
4 1-2 " " " $190 to $170.

SULKY HAY-RAKES.

CLEMENT'S HORSE HAY-FORK.

HARVESTING TOOLS

Of all kinds constantly on hand.

HAINES & PELL,
27 Courtlandt Street,
jy2t NEW YORK.

Babbittonian Penmanship.

THIS SCIENTIFIC and SELF-TEACHING system, which is being ordered by the thousand and sent to every part of the Union, consists of nearly one hundred copies on self-explaining card-board copy slips, and will guide the learner to an elegant command of the pen without schools or teachers. Terms, postpaid to all parts of the Union, **$1.50.** Terms to Teachers and Clergymen, **$1.**

"The Babbittonian system of Penmanship is splendid."—*J. H. Myers, Spencerian Penman.*

"It is chaste and beautiful."—*New York Evangelist.*

"The most *scientific* and *beautiful* of systems. An editor of a religious journal has called it magnificent, and worth $5 instead of $1.50."—*Journal and Messenger.*

"Babbittonian Penmanship is far in advance of all other systems. 1st. It is more scientific. 2d. It gives a more complete elementary discipline. 3d. It is more beautiful. 4th. It is more practical."—*R. M. Boggs, formerly Spencerian Penman.*

"Admirably adapted to the end in view."—*N. Y. Observer.*

The system is unequaled for use of schools as well as private learners, great reduction being made. *Splendid terms offered to Agents.* A fine

GOLD MEDAL

offered to the best Babbittonian Penman, and another for the best improvement from Babbittonian copies.

☞ Send for Circular, or forward money for Penmanship to **BABBITT & WILT,** Principals of *Miami Commercial College*, Dayton, Ohio. dec'64tf

Corn and Bean Planter Combined.

WE are manufacturing one of the most successful Two-Rowed Planters now in use. One man and horse can plant either in rows or checks from 10 to 12 acres per day, and do the work well. The machine is easily managed, and is of light draft for one horse. It is one of the greatest labor-saving machines of modern invention. Patented August 14th, 1860.

The demand for this Planter has continued to increase, until scores of them are now in use in Western New York, Michigan and Canada West.

Cash price at the Factory, $25.00, subject to alteration as stock and labor may require.

Please order early. Several orders came too late last year to be filled.

Orders with cash will receive prompt attention. A liberal discount made to merchants and agents.

For further description, send for circular.

ap5t WHITESIDE, BARNETT & CO., Brockport, N. Y.

THE LITTLE GIANT MICROSCOPE!

IS A NEW MAGNIFIER, of high power, for the examination of Living or Dead insects, Flowers, Seeds, Minerals, and thousands of other objects, and can be carried in the pocket or attached to a watch-chain. Price, $1.

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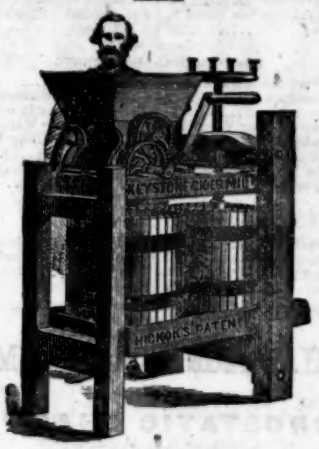

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HYDROSTATIC CHAMPION,

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